ZKiVision Client Software User Manual

Document version: 6.2

Software version: Pro V5.1

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Overview

This document describes the installation, functions, user interface and operations of ZKiVision Client Software.

General Instructions

Thank you for choosing our video surveillance product. Please read this manual carefully before using this product.

All functions of the product in this manual are for reference only. The actual product may differ from what is described in this manual due to updates from time to time. We disclaim liability for any dispute rising out of the unconformity between technical parameters and descriptions in this manual. We reserve the right to make any changes or amendments without prior notice.

For more details, visit our website www.zkivision.com or your local service outlets.

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1 Overview

1.1 Function

ZKiVision Client Software's functions include network video surveillance, Access management, and Attendance management.

- It supports multiple functions such as monitoring, videotaping, and alarm linkage of multiple IP cameras over the LAN and Internet.
- It supports multiple functions such as real-time surveillance and remote operation on entrance guard devices through the local area network (LAN) and Internet.
- This software allows users to conduct duty arrangement and obtain event records from the devices. The system will automatically parse event records as attendance records according to the duty arrangement. Different attendance status (signing in for work or signing off from work) will also be differentiated so that users can check the attendance records, make attendance reports, and perform other operations conveniently.

ZKiVision Client Software is a piece of network video surveillance software provided by ZK Technology free of charge.

As the video surveillance system is complex, it is strongly recommended to read the corresponding user manual before the first use of this software and confirm the device can be visited by browser on the LAN and Internet. This document describes how to use ZKiVision client software for video surveillance.

1.2 Operating Environment

Operating system: Windows XP, Windows 7.

CPU: I3 series or above.

Graphics: 1G or above discrete graphics.

Memory: 4G.

NIC: 1000 Mbps NIC.

System disk: SATA500G.

As a better computer can bring better effect of surveillance, it is recommended to use a better computer for video surveillance.

1.3 Procedure for Use of ZKiVision

Before using, proceed as follows:

Perform planning and installation of all IP cameras, Access and Attendance devices.

Change the IP addresses and ports of the IP cameras through the search software on the CD.

Access the IP camera from the browser and set the user name, password, alarm trigger mode (external alarm or motion detection), and system time for these IP cameras.

If you intend to access these IP cameras over the Internet, set dynamic domain names for them and perform port mapping on the corresponding routers.

The following takes the super user as an example to describe the use of the software. The operation procedures vary with users of different operation authorities. Users only need to operate the items displayed on the operation interface by following the procedure below.

Step 1: Run this client software.

Step 2: Log in to the system as a super user (***admin*** and its default password ***123456***) and change the default password.

Step 3: Search and add IP cameras to the system.

Step 4: Modify device parameters (including device information and network parameters).

Step 5: Set code stream.

Step 6: Set arming (alarm linkage settings and storage management).

Step 7: Preview the image.

Step 8: Set users (assign authorities).

Step 9: Set Department.

Step 10: Add person and issue card.

Step 11: Search and add Access & Attendance devices to this software. Then configure the basic information for devices.

Step 12: Add Access Time Zone and Access Holidays.

Step 13: Configure parameters for the door of access device.

Step 14: Divide the door as group. And then set access privileges to different groups.

Step 15: Sets permission for the personnel.

Step 16: Check Access Reports and Real-time monitoring.

Step 17: Set attendance rules. You can use the default system setting or change it as required.

Step 18: Set attendance Timetables that may be used during attendance management and configure relevant parameter information.

Step 19: Set the shifts frequently used during attendance management, which are the circular combination modes of attendance hours in time intervals.

Step 20: Arrange shifts and specify their respective on-duty staff. If the arranged staff requires a temporary change, you can use temporary duty arrangement to set.

Step 21: Maintain attendance management. During daily attendance, applications for asking for a leave, supplementary sign-in, festivals and holidays as well as taking working days off need to be set in case that exceptional situation occurs.

Step 22: Output attendance reports. Output attendance reports by statistics of attendance Timetables.

1.4 Conventions

To simplify the description in this manual, the following conventions are made:

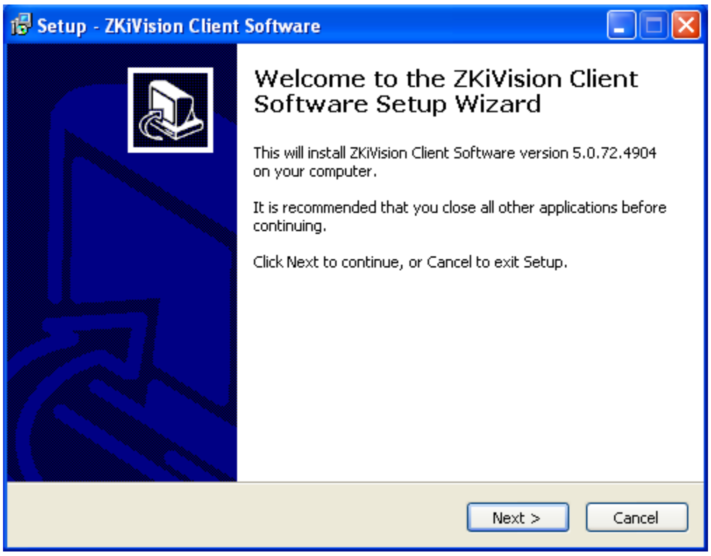
- Network video surveillance software is called software/system for short.
- Click indicates left click of mouse button.
- Double click indicates double left click of mouse button.
- Right click indicates click with the right button of the mouse.
- Some of the figures in this manual are for reference only.

2 Installation and Removal

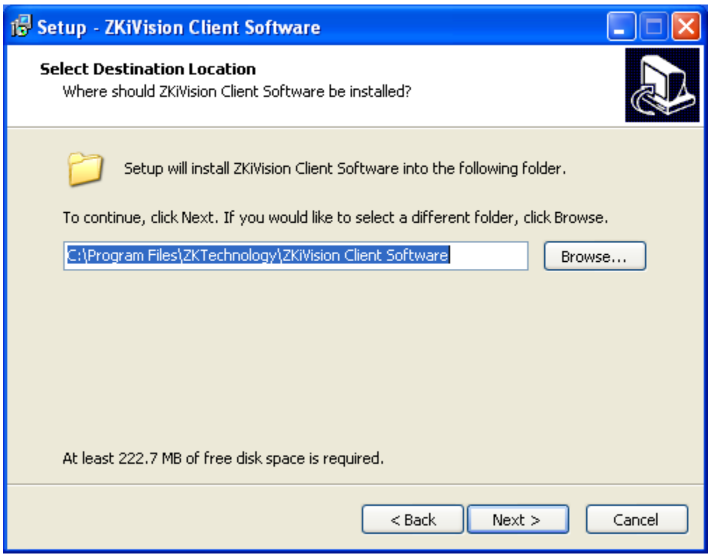
2.1 Installation

Step 1: Insert the delivery-attached CD in the CD drive. Double-click the installation package ZKiVision Client Software.exe. Choose the installation language, and then click [**OK**] to continue.

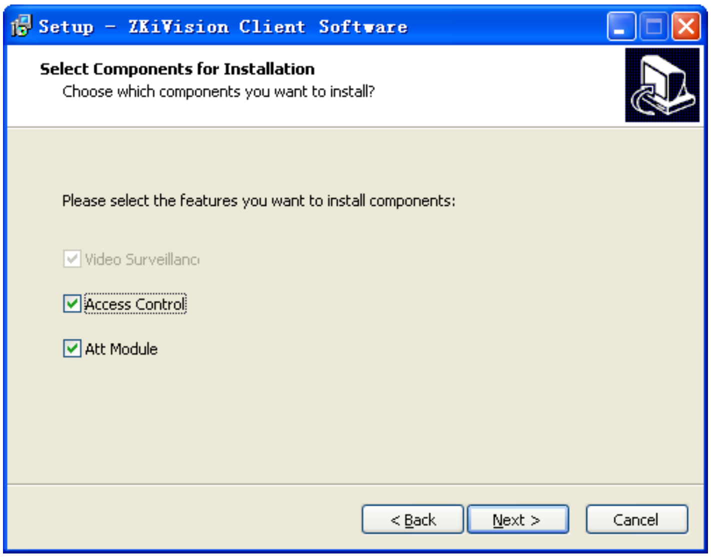
Step 2: Click [**Next**] when the **Install Shield Wizard** interface pops up.



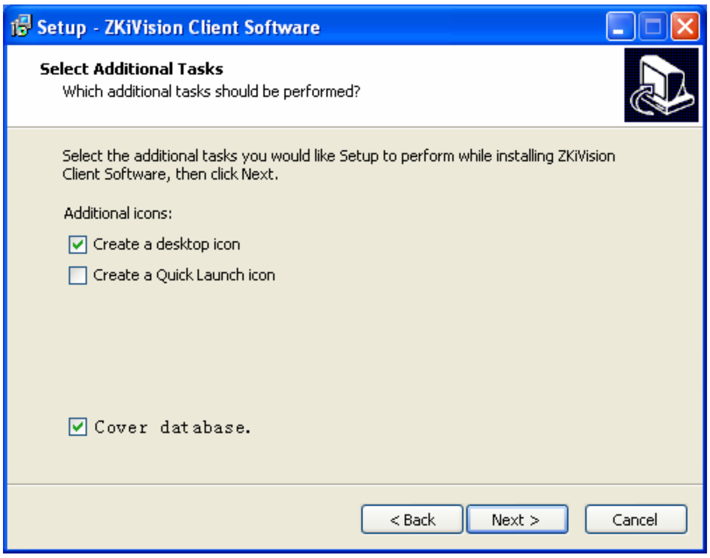
Step 3: Set the installation path. The default path is **C:\Program Files\ZKTechnology\ZKiVision Client Software**. Click [**Next**].



Step 4: Select Components for Installation, and then click [Next] button.

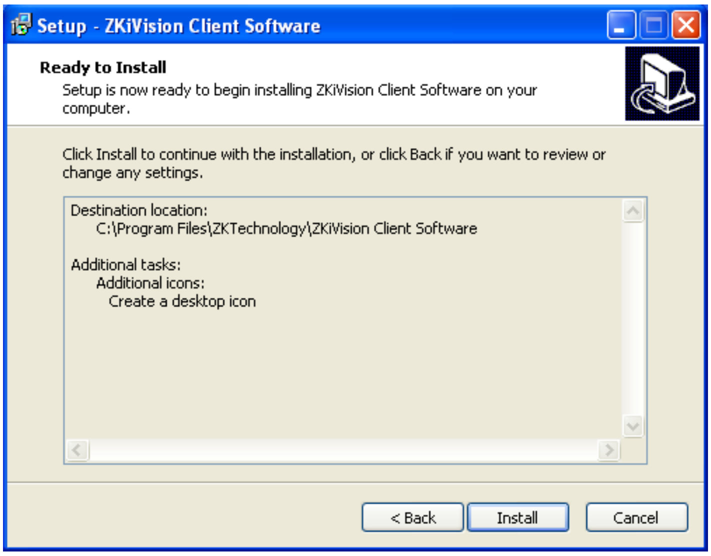


Step 5: Select Additional Tasks, and then click [Next] button.

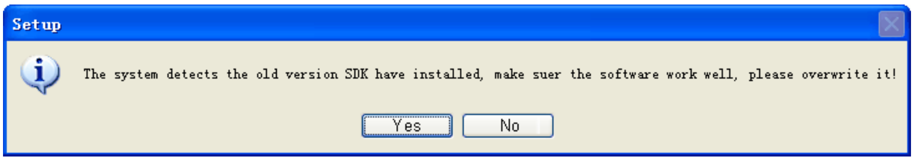


Note: If you installed the ZKiVision Client Software before, a prompt will be displayed, indicating that the installation folder already exists. If you install the ZKiVision Client Software in the original installation folder, the **Cover database** option is displayed under **Select Additional Tasks**. If the same software version has been installed on your PC, you can deselect the **Cover database** option. The original database continues to be used and no device needs to be added. If a different software version is installed, a software operating error will occur if the **Cover database** option is not selected.

Step 6: For reconfiguration, please click [**Back**], click [**Install**] to begin the installation process.



✍**Note**: During installation, the system will automatically check whether the SDK control of the old version is installed. If it is already installed, a prompt will be displayed as shown in the following figure:

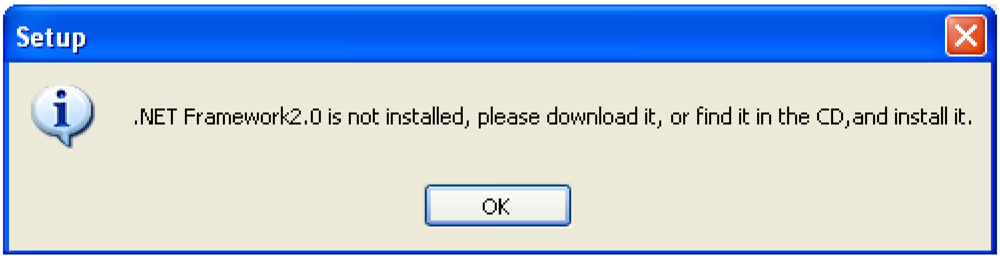


To ensure that this software runs properly, please click **[Yes]** to cover the SDK control of the old version.

Step 7: After installation is completed, click [**Finish**] to exit.

Note:

When you install the ZKiVision Client Software_Pro, the following prompt is displayed if the **Microsoft .Net Framework 2.0** is not installed on your PC.



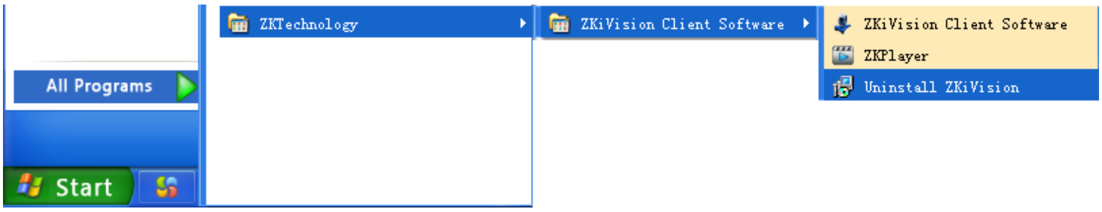
You must have the **Microsoft .Net Framework 2.0** installed before installing and using the ZKiVision Client Software_Pro.

2.2 Removal

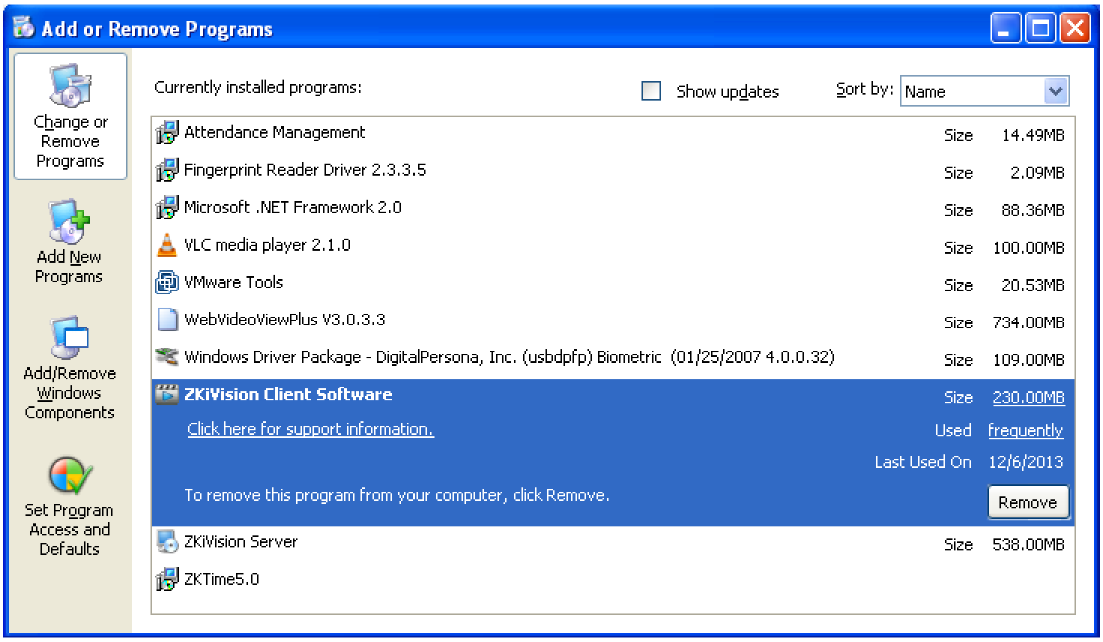
If you do not need to use anymore, you can delete it in the following two ways.

Close all the related programs before deletion.

Mode 1: Choose ***Start*** > ***All programs*** >***ZKTechnology***> ***ZKiVision Client Software*** > ***Uninstall*** to delete related documents.



Mode 2: Open the system control panel and choose ***ZKiVision Client Software***. Click [**Delete**] to delete related documents.



Notes: (1) The above two modes are not available for deleting all the documents. Deleting related documents under installation directory is necessary. **(2)** When the software is uninstalled, the database and user's setting will be kept.

3 Quick Start Guide

By means of the following procedures, you can perform a fast setting on the client software.

1. Install the client software and the **Monitor client** icon is displayed on the desktop.

2. Double-click the **Monitor client** icon to enter the system.

3. Choose **Settings** > **Local Device Manager** > **Search**. Click to display the **Search** interface.

4. Click to search all camera devices produced by our company on the LAN.

5. Choose camera in the search list. Change the remote device information (such as IP address and device port) on this interface.

6. In the search list, select one or more cameras or tick off **Select All** to select all cameras.

7. Click [**OK**] to finish adding cameras to the system.

8. Choose camera channel in the device list on the **Search** interface to modify the local device information (device names and user names). Partition the device.

9. Enter **Preview** interface. Double-click the camera channel in the device list or drag the channel into the preview cell to connect the device. Then the video can be previewed.

10. Choose **Record** from the shortcut menu or click to start the videotaping.

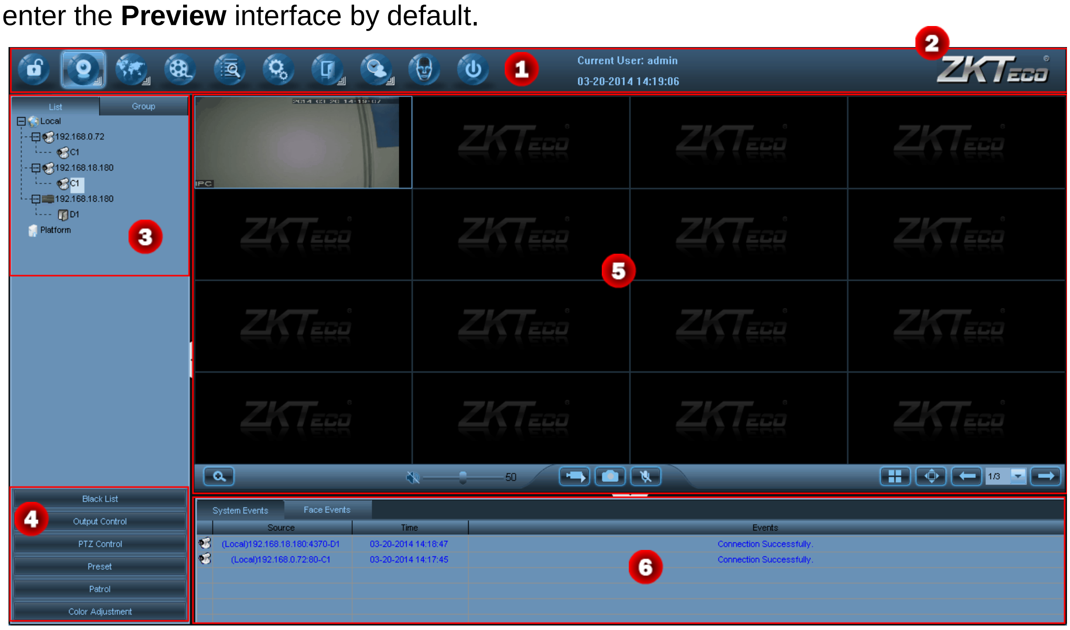
11. For more information of other functions such as user configuration, video playback, access management and alarm linkage configuration, see 5 Configuration.

4 User Interface

The user interface of ZKiVision is easy to operate. It is divided into the following 9 working areas, which switch over in tag page: **Lock user**, **Preview**, **E-map**, **Playback**, **Event Search**, **Setting**, **Access Management**, **Attendance Management, Face Function and Exit**.

4.1 Preview

Open to enter the **Preview** interface by default.

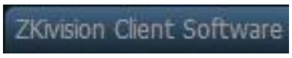


The description of software interface is shown in the following table:

Area	Description	Area	Description
1	Button bar	4	Control panel
2	Tab bar	5	Preview window
3	Device list/Group list	6	Event list

When the device is added to the system, it will automatically display in the device tree on the preview page. After the parameter setting is completed, you can operate video monitoring, camera preset and color conditioning on the preview page.

4.1.1 System Button Bar



Icon	Name	Function description
ZKivision Client Software	**Title**	Software Title.
?	**Help** button	Click ? to display user manual.
	About button	The software version is displayed, and a prompt indicating "Maximum number of record channels: 25" is displayed.
–	**Minimize** button	Click – to minimize the window to the system tray.
X	**Exit** button	Click X to pop up the exit prompt.

4.1.2 Tab Bar

Icon	Name	Function description
/	Lock/Unlock	It is used for locking, unlocking, current operator modification, or password modification.
	Preview	Click to display the **Preview** interface. It is used for camera and video surveillance, control, and management.
	E-map	Click to enter the **E-map** interface and you can watch live pictures of a passage while viewing its location. The e-map also supports viewing multi-passages and pan tilt zoom of live pictures.
	Playback	Click to display the **Playback** interface. It is used for video search and playback.
	Event Search	Click to display the **Event Search** interface. You can set different conditions for querying normal events, access events, face events, face searching and system events.
	Setting	Click to display the **Setting** interface. It is used for device management, audio video settings, and alarm linkage settings.
	Access Management	Click to enter the **Access Management** interface, where functions like personnel registration, access control, and report query and export are available for the access control device.
	Attendance Function	Click icon to enter the **Attendance Function** interface.
	Face Function	Click to display the **Face Function** interface. You can register faces, manage user information and set parameters for face detection.
	Exit	Click to exit the interface.
Current User: admin 03-20-2014 14:30:21	User profile	It is used for displaying the current user name and current date and time on the system.
	Logo	ZKTeco Logo

☺**Remarks**: Click the icon next to the function icon, a prompt will be displayed as shown in the following figure:

When you drag the function button with the icon , a split function window will be realized. In addition, you can drag the function window on the secondary display screen.

(1) After selecting and dragging the **Preview** button , the **Preview** page will be split into single windows as shown in the following figure:

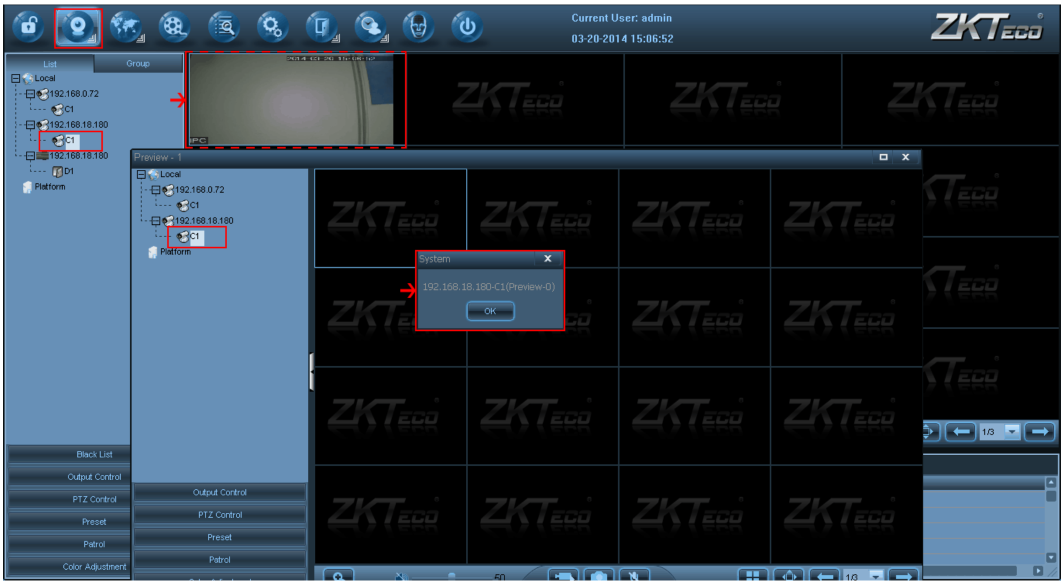
(2) When connecting to multiple displays simultaneously, you can drag a certain window directly onto another display screen horizontally.

☺**Remarks**: When the **Secondary Display** is on the left of the **Primary Display**, please drag towards the left; when the **Secondary Display** is on the right of the **Primary Display**, please drag towards the right. The Primary/Secondary Display settings please see 7.7 Primary/Secondary Display Setting.

: Full-screen button.

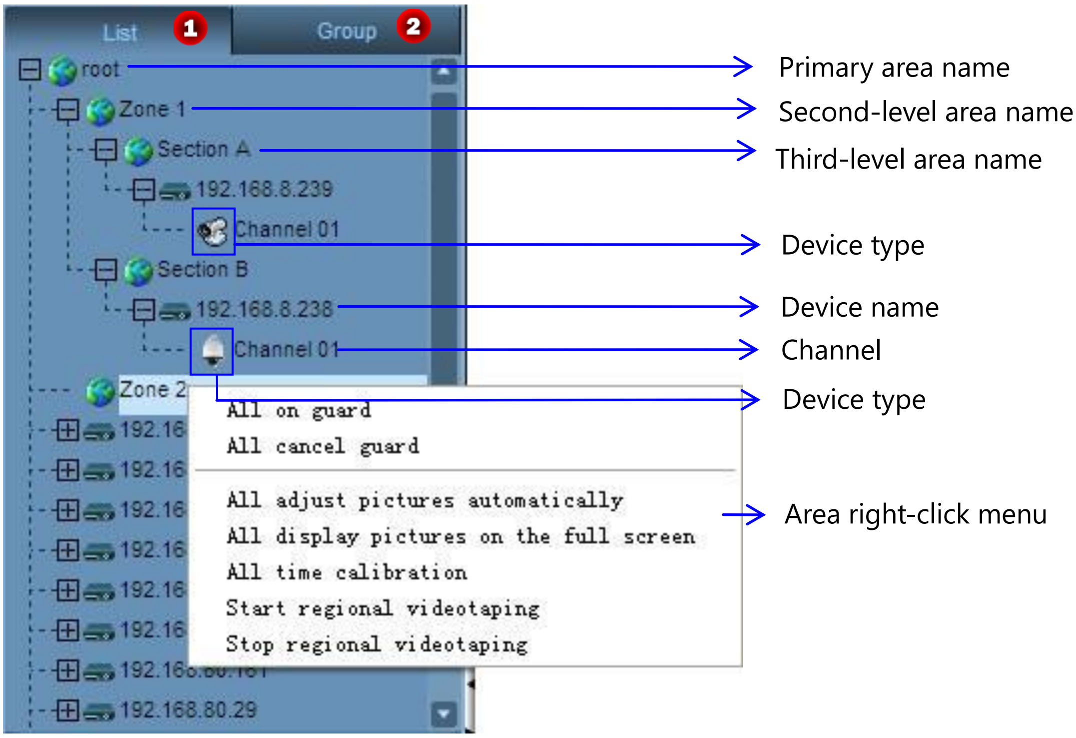
: Click this button to exit the program and close the current window.

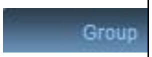
✍ **Note**: A passageway can only be previewed on only one display screen at the same time. Otherwise, a prompt will be displayed as shown in the following figure:



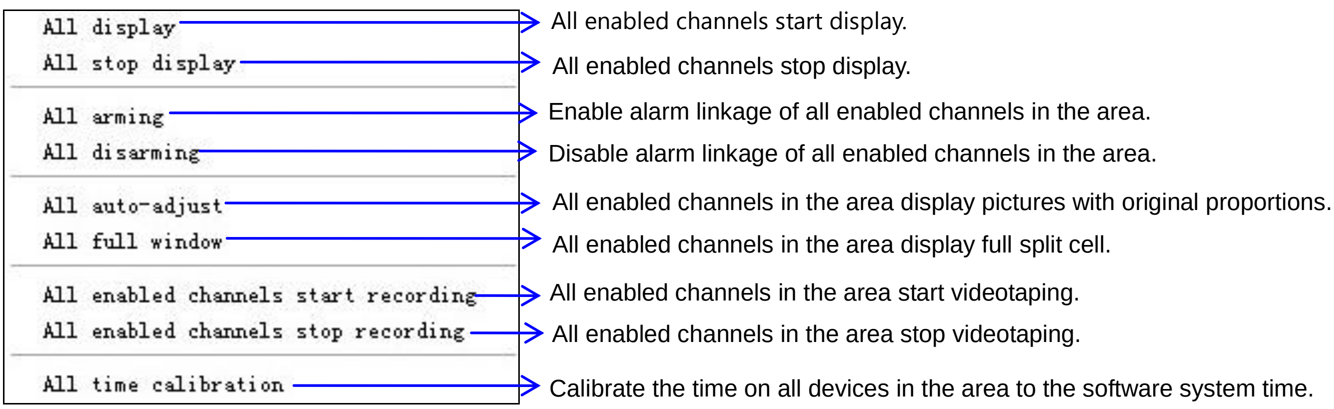
✍ **Note**: The **Preview** window can be split into **three** windows at most; other function windows (for the electronic map function, the entrance guard function and the work attendance function) can only be split into only one window. Besides, after separating the function windows of electronic maps, the entrance guard and the attendance management, the primary window of the software will automatically hide the function icon; after closing the split function windows, the primary windows of the software will redisplay split function icons.

4.1.3 Device List/Group List

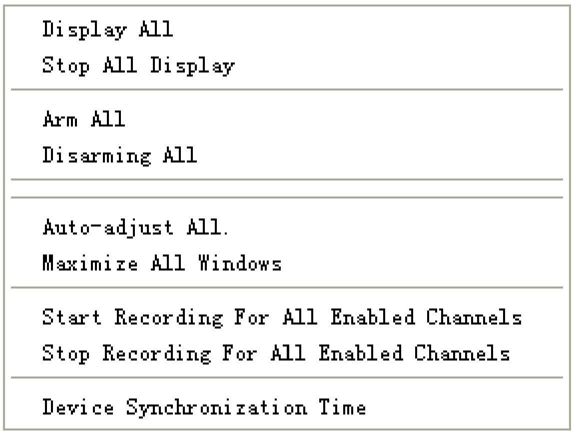


Icon	Name	Function description
	List mode	Display area, device, and channel according to the list hierarchy of user configuration.
	Group mode	Display group and channel according to the group hierarchy of user configuration.
	Area/Group	**Area**: Divide cameras into different areas according to their different locations to facilitate centralized monitoring against different areas for users. **Group**: Divide cameras into different groups according to their different monitoring types to facilitate centralized monitoring against different monitoring types for users.
	Device type	IP Camera/ Network Video Recorder (NVR)/ Digital Video Recorder (DVR)/access controll.

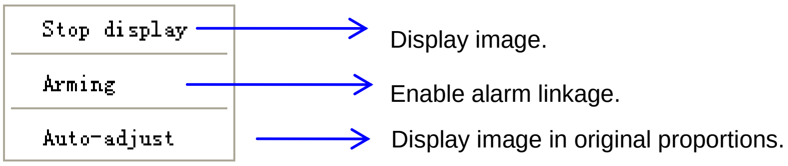
Right-click the area name to pop up the following function menu:



Right-click the device name to pop up the following function menu:



Right-click the channel to pop up the following function menu:



Note: For related devices added, device name modification and partition please see 5.23 How to Set and Apply Face Function.

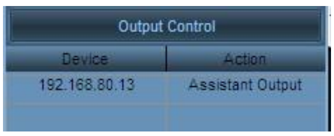
4.1.4 Control Panel

✧ **Blacklist**

Unfold the blacklist panel of face detection by clicking the ***Blacklist*** bar and the system will display in the blacklist the blacklist users that it identifies: On the left are face images that it detects and on the right are reference images at registration, as shown in the above figure.

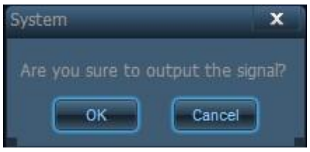
Note: For the setting and application of face identification, see 5.23 How to Set and Apply Face Function.

✧ **Output Control**



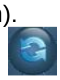
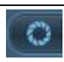
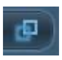
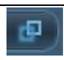
Unfold the output control panel by clicking **Output Control**. Select the camera channel from which the output is to be controlled. The output actions that can be controlled will display in the panel: If this

camera is not associated with the access controller, only the **Assistant Output** of the camera can be controlled; if it is associated with the access controller, both the **Assistant Output** of the camera and **Open the Door** by the access controller can be controlled. Double-click the action to be controlled and a confirmation box will display, as shown in the following figure:



Note: For the association of the IP camera and the access controller, see 5.1 How to Search and Add Camera/NVR/Access Controller to an Area.

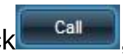
✧ **PTZ control panel**

Icon	Name	Function description
	Direction control	Control the rotation direction of the Pan-tilt by following the arrows (up, upper right, upper left, left, right, lower right, lower left, and down). Click  to control the automatic horizontal rotation of the Pan-tilt. Cancel this operation by another click.
	Narrow aperture	Click  to stop down if the camera lens has a power driven aperture control function.
	Widen the aperture	Click  to widen the aperture if the camera lens has a power driven aperture control function.
	The focal distance becomes smaller.	Click  to make the camera zoom in on distant pictures to implement monitoring if the camera lens has a power zoom function.
	The focal distance becomes larger.	Click  to make the camera zoom in on nearby pictures to implement monitoring if the camera lens has a power zoom function.
	Focus forward	Click  to make focus forward to obtain a clear picture if the camera lens has a power focus function.
	Focus backward	Click  to make focus backward to obtain a vague picture if the camera lens has a power focus function.
	Pan-tilt speed	Drag the slider left to slow down the pan-tilt speed or drag the slider right to accelerate the pan-tilt speed.

	Light	Click  to open the light when the external light devices are connected in a dark lighting condition. Close the light by another click.
	Windscreen wiper	Click  to enable the windscreen wiper when the cover is dirty. Disable the windscreen wiper by another click. It is recommended to adopt this function to avoid scrape on the lens when it is rainy or the cover is wet.

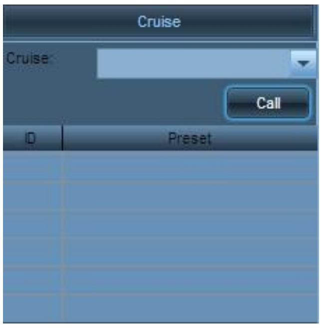
Note: The above functions are available only when they are supported by camera lens and external devices.

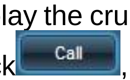
✧ **Preset Panel**

Click **Preset** bar to display the preset panel. Click , the Pan-tilt will rotate to the preset.

Note: For the preset settings, see 5.11 Configure Preset Locations and Cruise Routes.

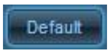
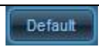
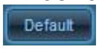
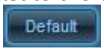
✧ **Cruise Panel**



Click **Cruise** bar to display the cruise panel. Select the required camera channel. In the cruise drop-down list, select a cruise. Click , the Pan-tilt will rotate along the cruise.

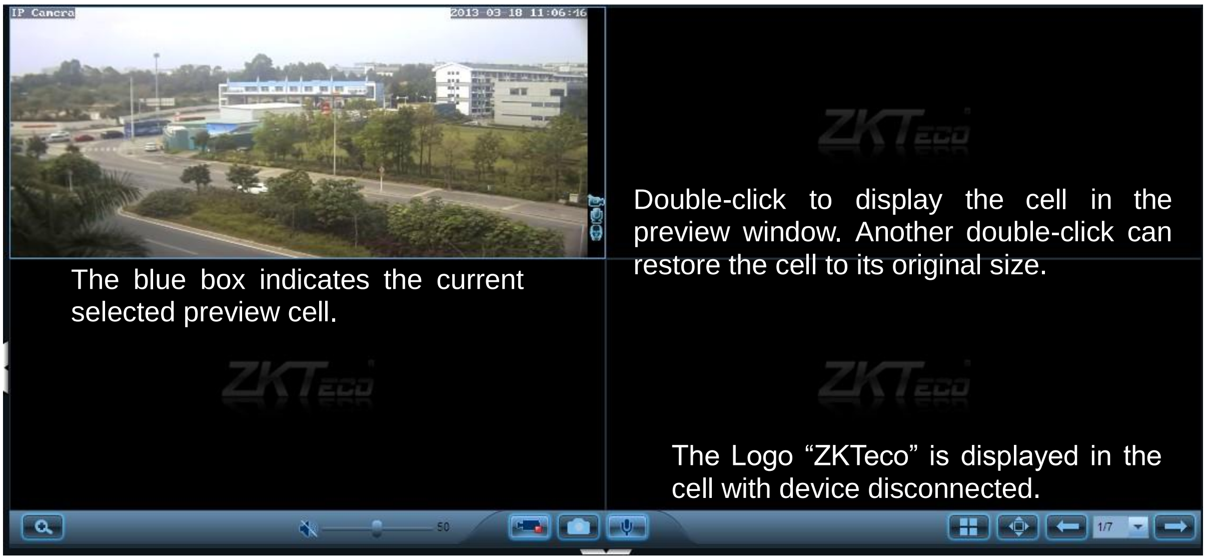
Note: For the preset settings, see 5.11 Configure Preset Locations and Cruise Routes.

✧ **Color Adjustment Panel**

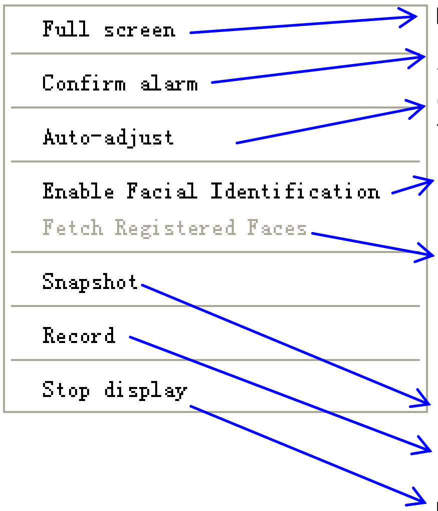
Icon	Name	Function description
	Brightness	The picture turns brighter from a left drag to a right drag (0~255).
	Saturation	The picture turns brighter from a left drag to a right drag (0~255).
	Contrast	The picture contrast can be enhanced from a left drag to a right drag. HD camera: 0~6. SD video camera: 0~255.
	Chromaticity	The picture color turns darker from a left drag to a right drag. This function is only applicable to the SD video camera (0~255).
	Shutter	**1.** When a monitored object is moving fast, a greater shutter value will reduce the blurring effects. **2.** Applicable only to wide dynamic devices (0~255)
	Sensitivity	**1.** In poor lighting conditions, the camera with a higher sensitivity will be more sensitive to light. **2.** Applicable only to wide dynamic devices (0~255)
	Illumination	**1.** In poor lighting conditions, better video effects will be achieved by adjusting to a greater value. **2.** Applicable only to wide dynamic devices (0~255)
	Default	Click  to restore the brightness, saturation, contrast, shutter, and sensitivity to the default value 80, 50, 0, 1, 17 respectively for WDR HD device. Click  to restore the picture brightness, saturation, and contrast to the default value 80, 50, and 0 respectively for HD device. Click  to restore the picture brightness, saturation, contrast, and chromaticity to the default value 120, 150, 140, and 255 respectively for SD device.

4.1.5 Preview Window

In the device list, double-click channel or drag the channel into the cell when a device is need to be connected.



Right-click the cell in **List Mode** to pop up the following function menu:



Full screen display of the **Preview** window.

Automatically adjust the picture to its original size.

Opening the door is the output action of the access controller associated with this IP device.

After choosing the **Enable face function**, **Disable face function** will be automatically displayed.

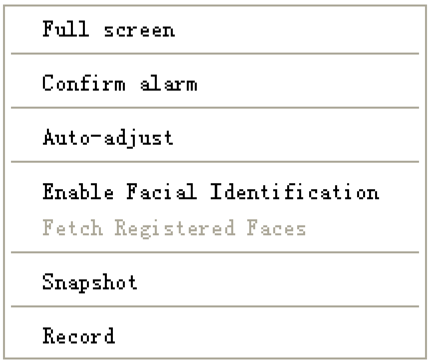
After ticking this option, face will be collected and displayed on the face event panel only when its template quality is higher than template quality threshold. When registering user online, enable this option because quality of faces collected this way will be higher.

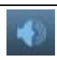
Snapshoot the current picture.

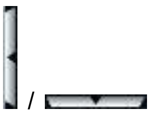
Videotape the current picture.

Disconnect the device. Click the camera channel or drag the channel to the picture to reconnect the device and display pictures.

Right-click the cell in **Group Mode** to pop up the following function menu:



Icon	Name	Function description
	Electronic magnification	Click the button and scroll the mouse to zoom in and zoom out. Drag the box to an area to view relevant contents.
	Sound on/off	Click  to open the audio and click  to close the audio after a channel or a picture is selected.

	Videotape/ Videotaping	After a channel or a picture is selected, click to start videotaping on the current channel. Click in the lower right corner of the selected picture to stop videotaping. The created video file is H.264 format file. The initial default storage path is **D:\MediaRecord**.
	Snapshot	Click **Snapshot** to automatically snapshoot the current picture. The default storage path is **C:\Picture** after a channel or a picture is selected.
	Enable intercom/Disable intercom	Click to enable the intercom. Click to close it. The sound of only one camera channel can be turned on sometimes. Turn off the sound of the last camera before turning on the sound of the next camera.
	Choose a picture	1. Click the button to select the number of images to be displayed in the preview window. The system supports 1-, 4-, 6-, 8-, 9-, 16-, 17-, 19-, 22-, 25- and 36-image display. **2.** The default is 4-image display.
	Full screen	Click to display the picture in full screen. Exit by another click. When the picture is displayed in full screen, move the cursor to the lowest part of the screen will display the toolbar.
	Page Selection	The system displays videos in pages if more than 25 channels of videos are connected. You can select the desired page number from the drop-down list.
	Previous Page/Previous Group	Click to jump to the last page when the window channels are more than the screen split numbers in the list mode. Click to jump to the last group of windows in the group mode.
	Next Page/Next Group	Click to jump to the next page when the window channels are more than the screen split numbers in the list mode. Click to jump to the next group of windows in the group mode.
	Group polling	Click to start group polling display against the user configuration in the group mode. Exit by another click.
	Expand/Fold	Click to fold the preview window. Click to expand the preview window.
	Surveillance	Surveillance is enabled on the channel.
	Face recognition	The face recognition function is enabled on the channel.
	Video recording	A video is being recorded on the channel.

	Sound playing	The sound playing function is enabled on the channel.
	Audio collection	The audio collection function is enabled on the channel.

For example: There are 3 groups (group 1-[1], group 2-[6], and group 3-[16]) in the current configuration. The cycling time is set to 5s. Select 6-split-cell display. 16 camera channels are connected in total.

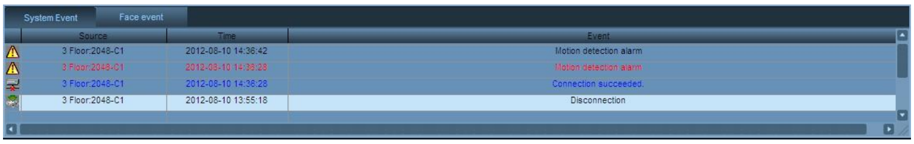
List mode: The first page of preview window displays CH1-CH6 cells. Click  to switch to the second page on which displays CH7–CH12 cells.

Group mode: Click  to display one full screen, to display 6-spit-cell picture after 5s, and to display 16-split-cell after another 5s. The 6-split-cell display will jump to the 16-split-screen display when you click.

Notes: (1). If you need to set the video storage disk, choose **Settings** >**Local settings** > **Storage management**. **(2).** If you need to modify the format or storage location of the capturing pictures, choose **Settings** > **Local settings** > **System settings**. **(3)**. Dividing cameras into different groups is a prerequisite to group switching, see 5.4 Group Cameras for details. **(4)**. If you need to modify the group polling time, choose **Settings** > **Local settings** > **System settings**.

4.1.6 Event Panel

4.1.6.1 System Event



Event information is color coded:

• **Red** > Alarm event.

• **Blue** > General event.

• **Black** > Already browsed information.

Source: The names of cameras that the message comes from.

Time: The time at which events occur.

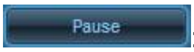
Event: Brief description of event type:

Icon	Description
	Connection succeeded
	Connection failed
	Alarming

	Alarm stopped

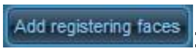
4.1.6.2 Face Event

The system can display detected faces on the face event information panel. If the face it identifies is that of a registered user, ***user name and face identification marks*** will be displayed under the face image. If the face is that of an unregistered user, a question mark (?) will be displayed under the image. You can tick any or all face images and add them to the face registration list.



: Click **Pause** to suspend the rolling display of the face identification results and the button automatically switches over to **Play**.

: After pause, you can manually tick the detected images or tick **Select all** to select all the images displayed in the identification results.



: Click this button to add the ticked images to the face registration list.

4.2 Login/Logout

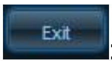
On this page, you can switch over from user to user and modify user password.

User: Select the user name for login system.

User password: Type in the user password.

: If it is selected, the user name and password are remembered. You do not need to enter the password if you log in to the system from the same computer.

: Click **Login** to log in to the system after selecting the user name and typing in password.



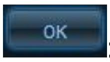
: Click **Exit** to exit the **Login** interface.

: Click **Change PW** after selecting an existing user name to modify the password.

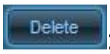
Old password: Type in the old password.

New password: Type in the new password.

Confirm password: Type in the new password again.



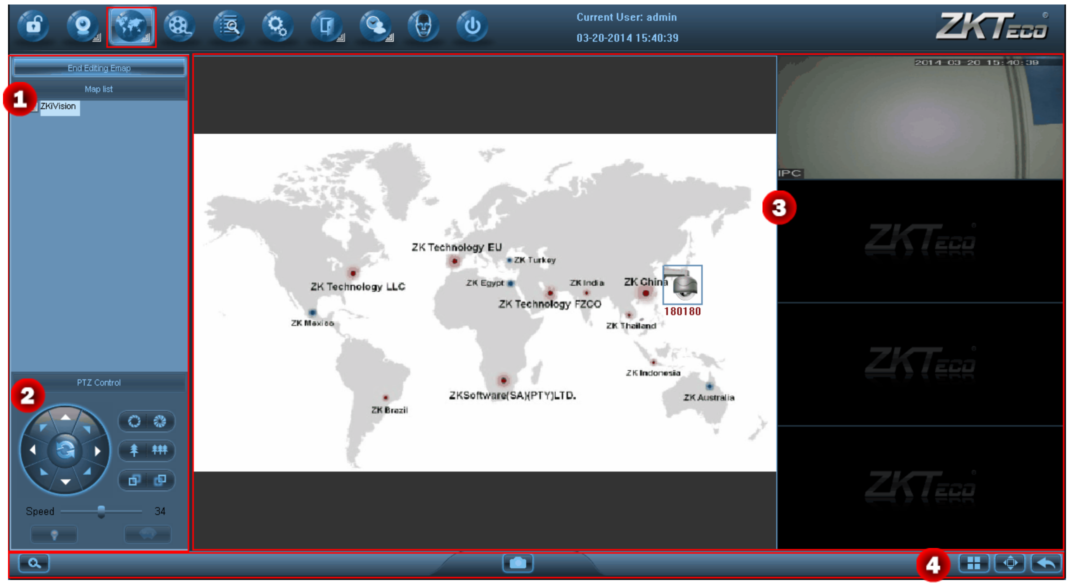
: Click **OK** to submit the new password.



: Click **Delete** to cancel this operation.

Note: Super user ***admin*** exists in the system by default and the default password is ***123456***.This super user cannot be deleted and his user level cannot be modified.

4.3 E-map



Region	Description
1	Map List
2	PTZ Control Panel
3	E-Map Window

	Map Display Window	Video Play Window
4	Toolbar	

The system supports electronic maps. It allows users to upload electronic maps and conveniently and visually deploy cameras on the electronic maps, facilitating unified management of devices.

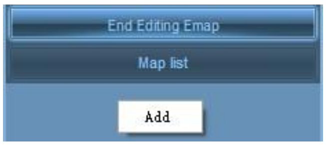
Note: Refer to 5.22 How to Set E-map for e-map settings.

4.3.1 Map List

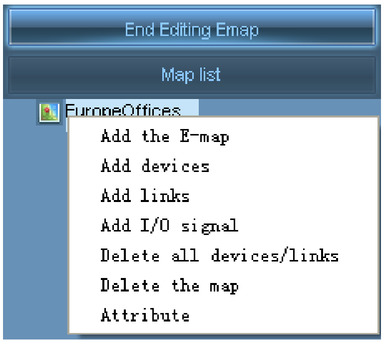
Access the map editing interface by clicking **Click and Edit E-map** and the button switches over to **End Editing E-map**.

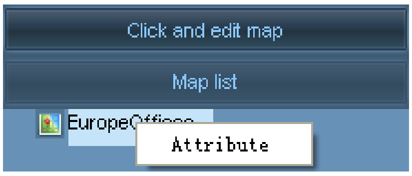
Click **End Editing E-map** to exit e-map editing and the button switches over to **Click and Edit E-map**.

In the initial state, when you right click on the blank of the map list after accessing the map editing interface, the **Add** map page will be displayed.



Right-click the name of map to pop up the following functional menu:





1. Add map: Click to enter the interface of adding map.

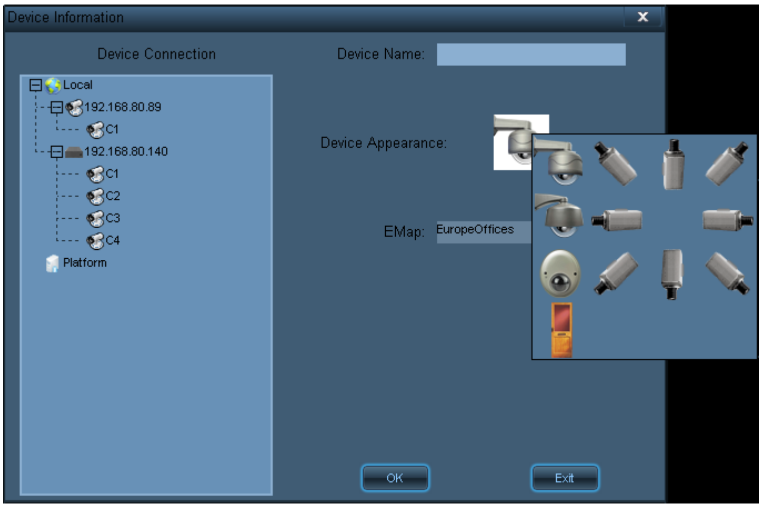
Click **Browser** to find the images in BMP in the local computer, input the map name and then click **OK** to complete the map adding.

Note: Search for BMP pictures on the local PC. JPEG, PNG, and GIF pictures can also be added.

2. Add device: Click to enter the interface of adding device.

You can mark the location of a device on the map by adding the device icon on the map.

Select the device to be linked. Set the name and appearance of the device, etc. and then click  to complete the adding.

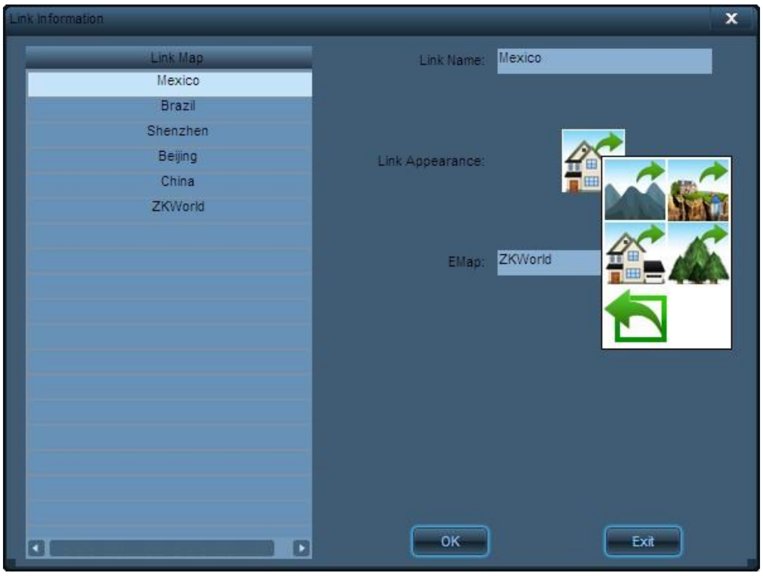


When adding device succeeds, the chosen visual icon for the device will be displayed on the map. You can drag the location of the device icon by moving the mouse cursor to the device icon, pressing and holding the left button of the mouse. Exit editing. After the device is armed, the device icon will blink when there is an alarm input signal. You can double-click the device icon or drag the icon to the video play window to play the video in real time.

3. Add link: Click to enter the interface of adding link.

By adding link icon on a map, a user can conveniently and expediently enter and check the map whenever he wants to.

Select the map to be linked. Set the name and appearance of the link, etc., and then click  to complete the adding.



After successfully adding link, the selected icon of link appearance appears on the map. Move the cursor to the icon, and hold down the left button to move the location of link icon. After exiting the condition of editing, double-click the icon to enter the linked e-map.

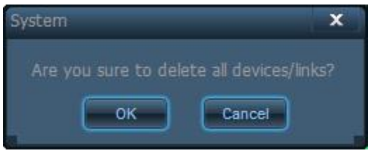
4. Add I/O Signal: Click to enter the interface of adding I/O signal.

When an alarm input device is connected to the IP camera or to the access controller associated with the camera, auxiliary input will be generated and when an alarm output device or an exit switch is connected to the IP camera or to the access controller associated with the camera, auxiliary output signals will be generated. By adding input-output signal icons, you can mark on the map the locations of the devices that are connected to the IP camera or the access controller.

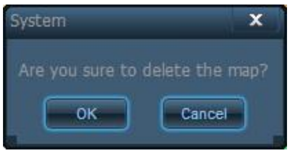
After selecting the devices to be connected, the signal type, setting signal name and signal appearance, click [**OK**] to finish the adding.

When adding signals succeeds, the chosen visual icons for the signals will be displayed on the map. You can drag the locations of the signal icons by moving the mouse cursor to the signal icons, pressing and holding the left button of the mouse. Exit editing. After the device is armed, the input signal icon will blink when an external alarm signal comes in. After confirming on site, the security guard can right click the icon to confirm the alarm. Then the icon will stop blinking. The guard also can double-click the output signal icon to control the output.

5. Delete all devices/links: Click to delete all device icons and map icons linked on the map.



6. Delete the map: Click to delete the map.

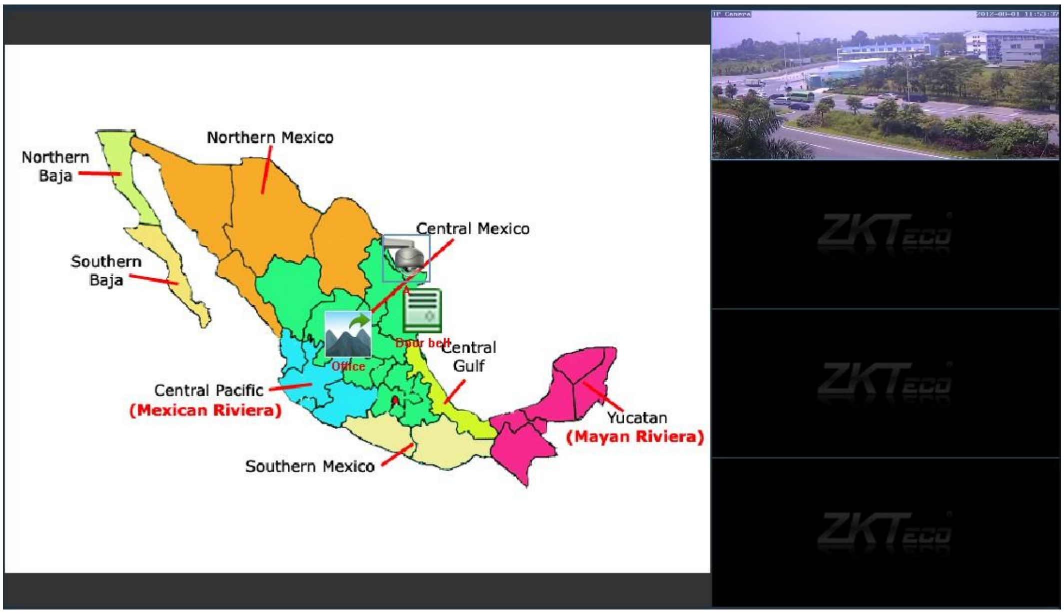


7. Attribute: Click to display the attributes of the map. The attributes cannot be edited in the unedited status.

4.3.2 PTZ Control Panel

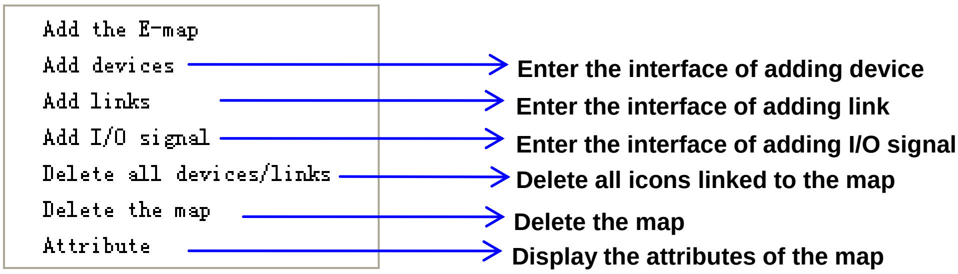
Note: For details, see 4.1.4 Control Panel.

4.3.3 E-Map Window



4.3.3.1 Map Display Window

- In edit status, right-click a map to pop up a functional menu as shown in the above figure:

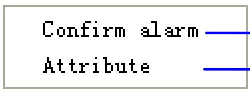


- In edit status, right-click the link/device icon to pop up the following functional menu:

Delete the link/device icon

Display the attribute of the icon

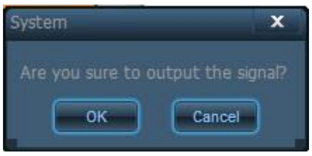
- In non-editing status, you can right click the map or the link icon to view its attribute.
- In non-editing status, when there is alarm input, the device or input signal icon will blink. When you right click, the function menu shown as follows will be displayed:



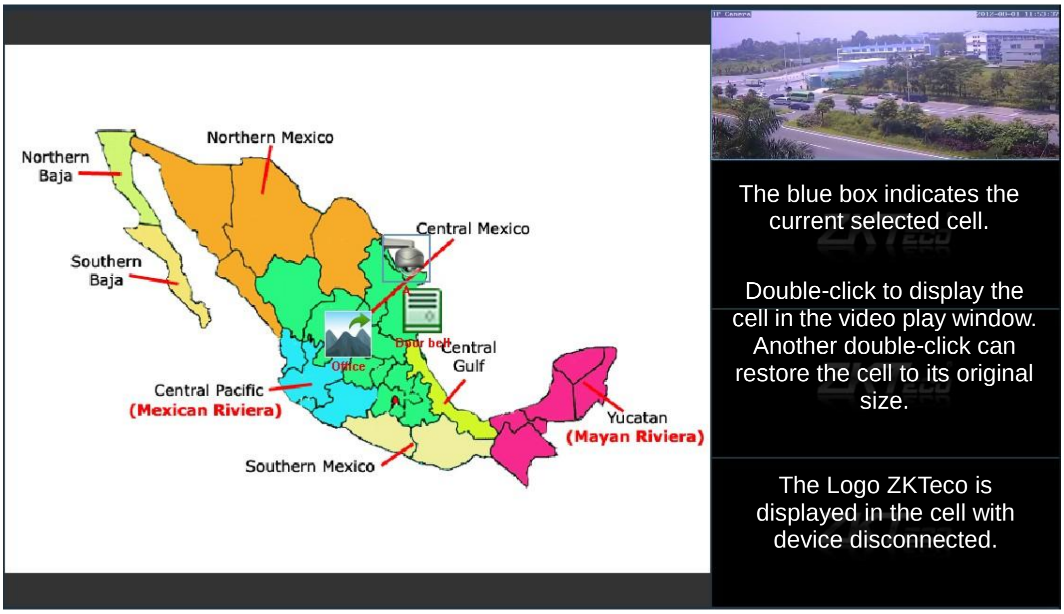
Click to confirm the alarm and the icon will stop blinking

Display the attributes of this icon

- In non-editing status, when you double-click the output signal icon, the function menu shown as follows will be displayed:

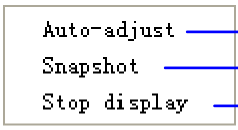


4.3.3.2 Video Play Window



You can double-click the device icon or drag the icon to the video play window to play the video in real time.

Right click on the play cell. The function menu shown as follows will be displayed:



Automatically adjust the image to its original size.

Capture the current image

Disconnect the device. Double-click the device icon or drag the icon to the cell to reconnect the device and display image.

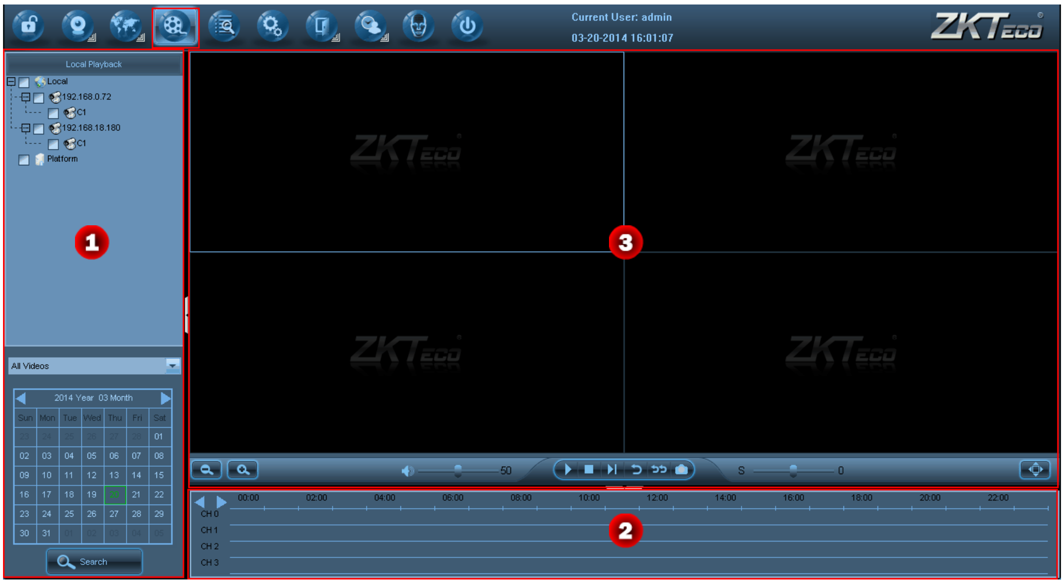
4.3.4 Toolbar

Icon	Description	Function
	Electronic magnification	Click the button and scroll the mouse to zoom in and zoom out. Drag the box to an area to view relevant contents.
	Snap-shot	After choosing the cell, click this button to snap-shot the scene. The default storage path is C:\Picture.
	Select cells	**1.** You can choose a video play window to display the number of cells. The system supports one-, two- or four-cell display. **2.** By default, the video is displayed in four cells.
	Full Screen	**1.** Click the button to have the map display in full screen, and click again to exit the full screen. **2.** During full screen, move the cursor to the bottom of the screen to show the toolbar.
	Back	Click the button and back to the previous map.

Notes: **(1)** The setting of map must be performed in edit status, and the map cannot be edited in non-editing status. **(2)** In non-editing status, right-click the map, link, I/O signal or device to check its attributes.

4.4 Playback

4.4.1 Local Playback



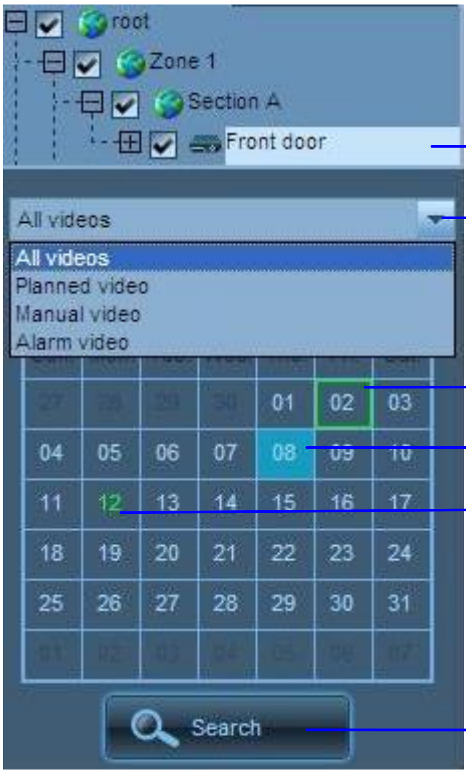
Area	Description
1	Video search panel
2	Timeline panel
3	Playback window

Local Video: is stored in the local computer.

After setting search conditions by date on the video search panel, click **Search**, and the search result will be displayed on the timeline panel. You can play back the video by choosing the start time for playback on the timeline panel and clicking **Play** on the playback window.

Note: See 5.12 Search and Playback Videos by Date for information regarding to video search by date.

4.4.1.1 Video Search Panel



1. Tick off camera channels of the video to search for (at most 4 channels).

2. Choose a videotaping type to search for: All videos, Planned videos, Manual videos or Alarm videos.

3. Click to choose the date to search videos (in green box)

Date on which videos were made in this month (on blue background) (Shown after searching)

Current date (in green characters)

4. Click [**Search**]

4.4.1.2 Timeline Panel

The search results are displayed on **Timeline** panel after you choose the date on which the videos were made.

Icon	Name	Function description
	Zoom out	Click  to scale down the timeline in **Timeline** panel and display the video records in a long period of time.
	Zoom in	Click  to scale up the timeline in **Timeline** panel and display the video records in a long period of time.
	Leftward	Click  to move the timeline leftward when the timeline ratio is displayed.
	Rightward	Click  to move the timeline rightward when the timeline ratio is displayed.
CH0–CH3	Channel	ZKiVision supports concurrent search and video playback in four channels.
00:00–24:00	Temporal scale	Divide the time of the day into 48 equal portions, and the minimum scale is half an hour. The time point of the current position will be displayed on the **Timeline** panel when you move the mouse on the **timeline**. Click the time point to accurately position the video.

(blue)	Manual video
(green)	Planned video
(red)	Alarm video
	The starting point of video playback.

4.4.1.3 Playback Window

Icon	Name	Function description
/	Sound on/off	After the camera is connected, click to turn the sound on, and click again to turn the sound off.
	Volume	Drag the volume slider left to turn down the volume or drag the volume slide right to turn up the volume (1-100).
/	Play/Pause	After you a camera channel is selected, click to play back the video, and click again to pause the video.
	Stop	Click to stop the video during the video playback.
	Single-frame play	Click to perform a single-frame play during the video playing. Each frame image will be displayed by every single click.
	Replay	Click to replay the video in the current channel.
	All replay	Click to replay all the videos in four channels.
	Image capture	Click to capture the image and save it to hard disks.
	Play speed	Drag the speed slider left to slow down the play speed or drag the volume slide right to accelerate the play speed (1-100). Speed adjustment range includes -2 (1/4 speed), 0 (normal speed), and 2 (2 times speed). The device uses normal speed (0) by default.

 / 	Expand/Fold	Click  to fold the **Playback** window, and click  to expand it.

4.4.2 Device Playback

Device Video: is stored in NVR/DVR and other remote device hard disks, other than that stored locally.

After specifying search conditions on the remote video search panel, click Search. Then, search results are displayed on the time axis panel. Select the playback start time on the time axis panel and click Play in the playback window to play back a device video.

Note: The device video search and playback page is similar to the local video search and playback page. For details, see 4.4.1 Local Playback.

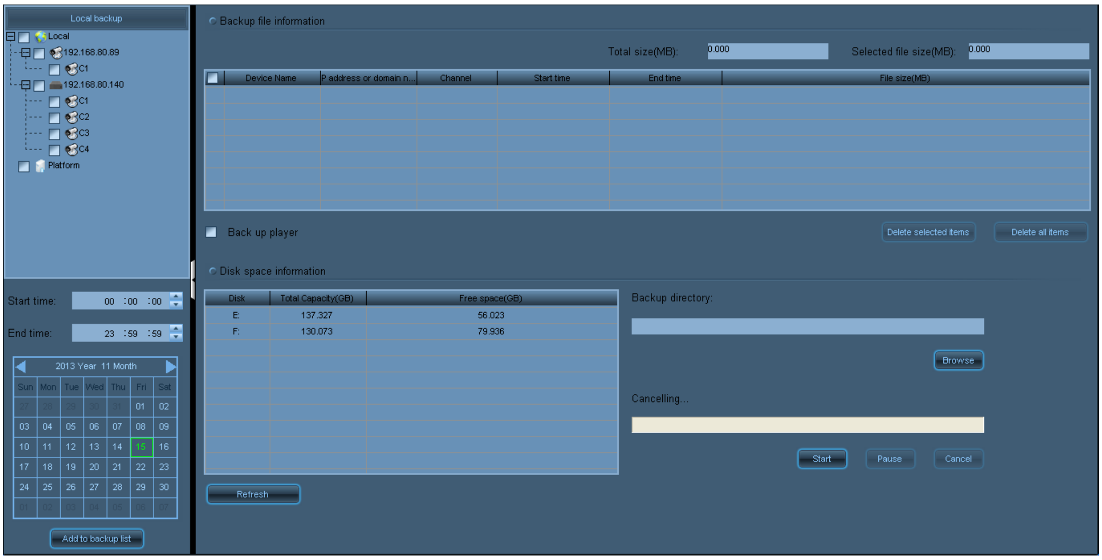
4.4.3 Server Playback

Server Video: is stored in MTS and other servers, other than that stored locally.

After specifying search conditions on the remote video search panel, click Search. Then, search results are displayed on the time axis panel. Select the playback start time on the time axis panel and click Play in the playback window to play back a remote video.

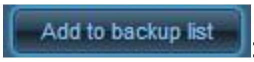
Note: The server video search and playback operations are similar to the local video search and playback operations. For details, see 5.12 Search and Playback Videos by Date.

4.4.4 Local Backup



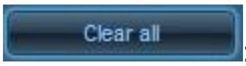
Local Video Backup: is to back up videos stored locally to the specified disk.

After setting search conditions by date on the video search panel, click **Add to backup list**, and the search results will be displayed on the backup file list. Click the video to be backed up on the backup file list, set the backup path, and click **[Start]** to back up the video.



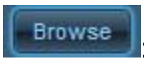
: Click the button after selecting the camera and the search time. If there is a video from the selected camera for the set search time, the search results will be displayed in the backup list on the right.

: Select one message in the backup list, and click the button to delete the message.



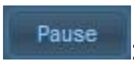
: Click the button to delete all the messages in the backup list.

: Tick this option to back up the media player during video backup.

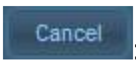


: Click the button to select the backup catalogue.

: Click the button to start backup.

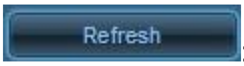


: Click the button to pause backup.



: Click the button to cancel backup.

: Click once to select a disk in the disk list, and click the button to format the selected disk.

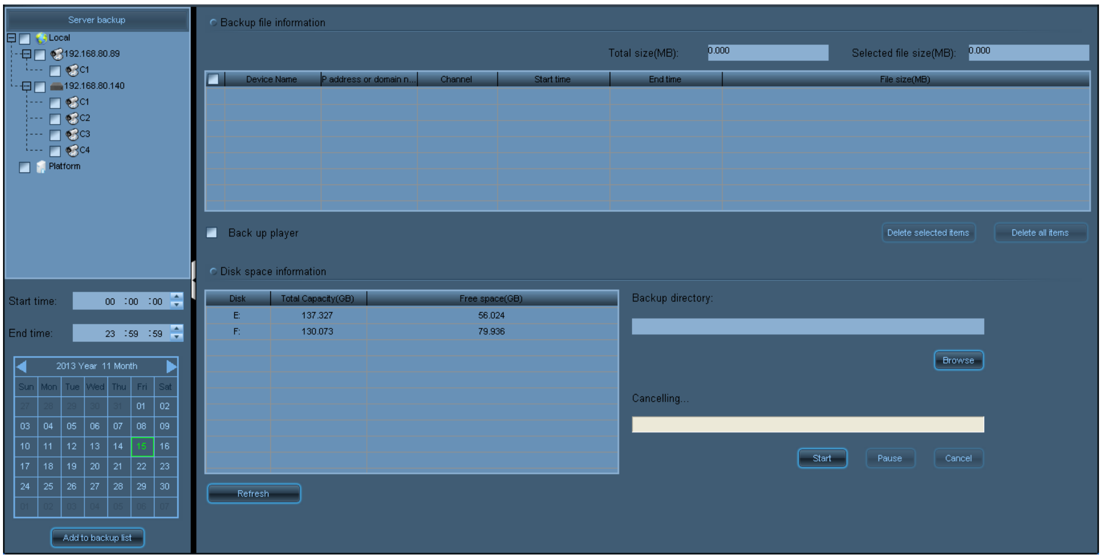


: Click to refresh the disk information.

Note: Refer to 5.13 Back Up Videos for how to back up the video.

4.4.5 Server Backup

Server Video Backup: is to back up videos stored in the server to the specified disk.



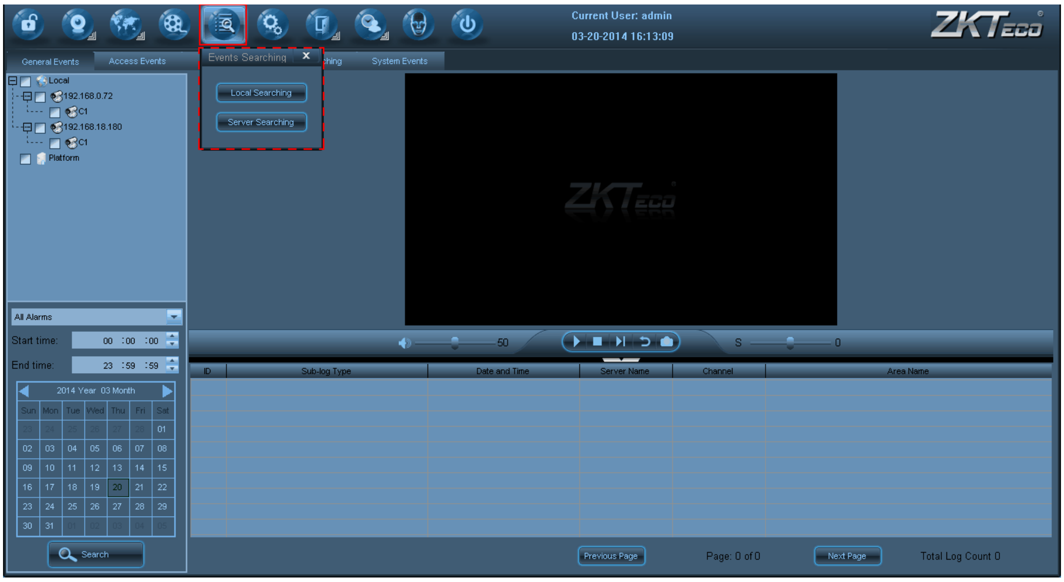
Notes: **(1)** The server video backup interface is similar to the local video backup interface. See 4.4.4 Local Backup. **(2)** The server video backup operation is similar to the local video backup operation. See 5.13 Back Up Videos.

4.5 Event Query

After setting search conditions on the log search panel, click **[Search]** or **[Query]**, and the search results will be displayed on the log list. You can query or play back the associated video.

Local Searching: is to search general events, access events, face events, and face searching and system events in the local client.

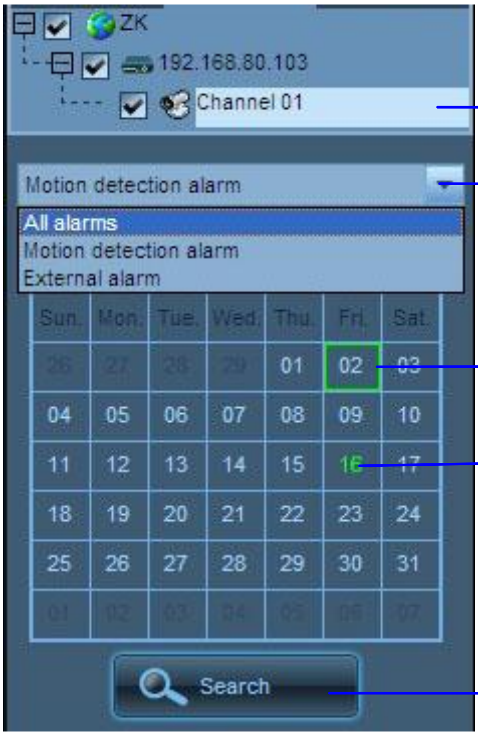
Server Searching: is to search general events, access events and face events in the server.



4.5.1 General Event

Area	Description
1	Log search panel
2	Log list
3	Playback window

4.5.1.1 Log Search Panel



1. Tick off the camera channels of alarm log to search for.

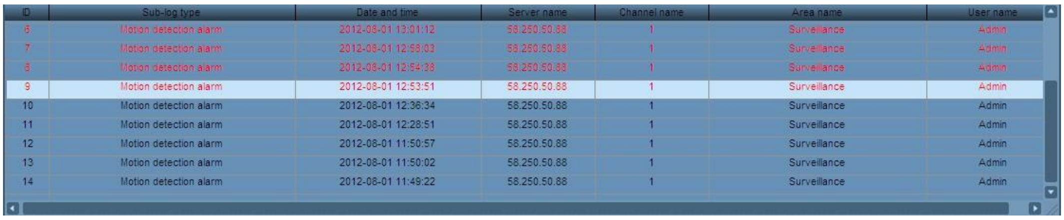
2. Choose a videotaping type to search for: All alarms, Motion detection alarm, or External alarm.

3. Click to choose the date to search videos (in green box)

Current date (in green characters)

4. Click **[Search]**.

4.5.1.2 Log List



ID	Sub-log type	Date and time	Server name	Channel name	Area name	User name
6	Motion detection alarm	2012-08-01 13:01:12	58.250.50.88	1	Surveillance	Admin
7	Motion detection alarm	2012-08-01 12:58:03	58.250.50.88	1	Surveillance	Admin
8	Motion detection alarm	2012-08-01 12:54:38	58.250.50.88	1	Surveillance	Admin
9	Motion detection alarm	2012-08-01 12:53:51	58.250.50.88	1	Surveillance	Admin
10	Motion detection alarm	2012-08-01 12:36:34	58.250.50.88	1	Surveillance	Admin
11	Motion detection alarm	2012-08-01 12:28:51	58.250.50.88	1	Surveillance	Admin
12	Motion detection alarm	2012-08-01 11:50:57	58.250.50.88	1	Surveillance	Admin
13	Motion detection alarm	2012-08-01 11:50:02	58.250.50.88	1	Surveillance	Admin
14	Motion detection alarm	2012-08-01 11:49:22	58.250.50.88	1	Surveillance	Admin

Different colors indicate different types of log:

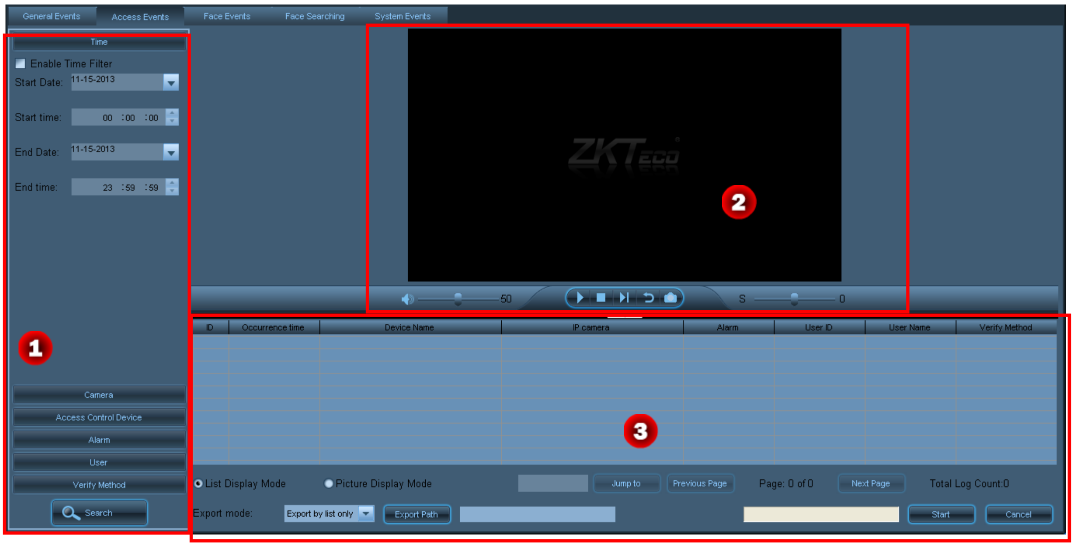
• **Red** -- Alarm log with associated video.

• **Black** -- Alarm log without associated video.

4.5.1.3 Playback Window

Note: For details about the icon and functions of the playback window, see 4.4.1.3 Playback Window.

4.5.2 Access Event



Area	Description
1	Log search panel
2	Log list
3	Playback window

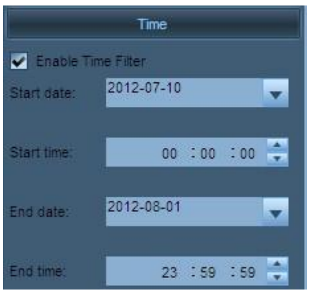
Access event: records and stores access event logs after the access control and video linkage function is configured. For example, the access event sets whether to start video recording linkage based on the alarm setting for alarm linkage and door opening linkage. The access event also displays video-contained events in red. You can double-click a log to play the contained video.

4.5.2.1 Log Search Panel

To search access controller event logs, you can set several filtering conditions, such as time, IP camera, access controller, alarm pattern, user ID and verification mode.

Note: The combination of various filtering conditions will filter the search results. If none of the filtering conditions is enabled, then all the current day's logs of all the devices will be searched by default.

✧ **Enable Time Filter**



After ticking **Enable Time Filter**, you can set the start time and end time for log searching.

✧ **Enable Camera Filter**

After ticking **Enable Camera Filter**, you can select the IP cameras of which the logs are to be searched for.

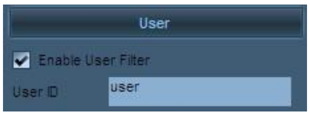
✧ **Enable Access Filter**

After ticking **Enable Access Filter**, you can select the access controllers of which the logs are to be searched for.

✧ **Enable Alarm Filter**

After ticking **Enable Alarm Filter**, you can select types of alarm log to be searched for.

✧ **Enable User Filter**

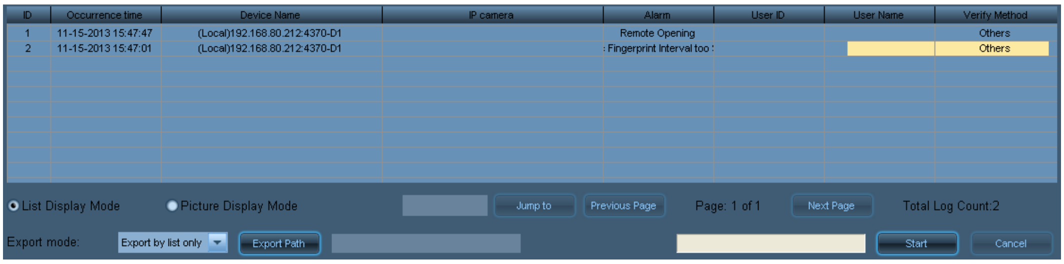


After ticking **Enable User Filter**, you can search for logs by user ID.

✧ **Enable Verification Mode Filter**

After ticking **Enable Verify Mode Filter**, you can search for logs by verify mode.

4.5.2.2 Log List



✧ **List Display Mode**

Search results are displayed by list, and different colors indicate different types of logs:

•**Red** -- alarm logs with linked videos

•**Black** -- alarm logs without linked videos

✧ **Picture Display Mode**

If captured pictures of access events are enabled in the Alarm Linkage Settings interface, search results can be displayed by picture. Click to view related pictures and double-click to play linked videos.

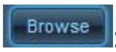
Previous Page: Click to view the search results in the previous page.

Next Page: Click to view the search results in the next page.

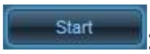
Total Log Number: is the number of searched logs.

Export Mode: includes Export by list only, Export by picture only, or Export all.

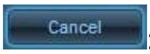
: Click the button to set the export path.



: Click the button to select the backup directory.



: Click the button to start exporting.

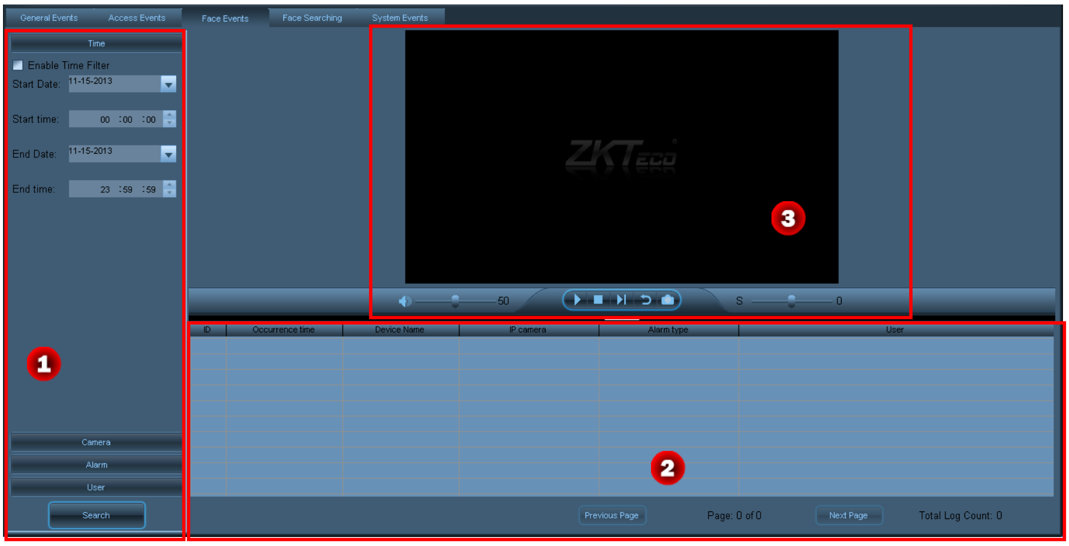


: Click the button to cancel exporting.

4.5.2.3 Playback Window

Note: The playback window of access controller events is the same as that of common events. For details, see 4.4.1.3 Playback Window.

4.5.3 Face Event



Area	Description
1	Log search panel
2	Log list
3	Playback window

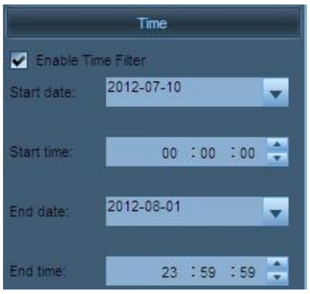
Face event: records and stores face event logs after the face recognition function is enabled. For example, the face event sets whether to start video recording linkage based on the alarm setting for unrecognized faces, common users, and blacklisted users. The face event also displays video-contained events in red. You can double-click a log to play the contained video.

4.5.3.1 Log Search Panel

To search for face event logs, you can set several filtering conditions, such as **Time**, **IP camera**, **Alarm** and **User ID**.

Note: The combination of various filtering conditions will filter the search results. If none of the filtering conditions is enabled, then all the current day's logs of all the devices will be searched for by default.

✧ **Enable Time Filter**



After ticking **Enable time filter**, you can set the start time and end time for log searching.

✧ **Enable Camera Filter**

After ticking **Enable camera filter**, you can select the IP cameras of which the logs are to be searched for.

✧ **Enable Alarm Filter**

After ticking **Enable alarm filter**, you can select types of alarm log to be searched for.

✧ **Enable User Filter**

After clicking **Enable user filter**, you can search for logs by ID of face registered user.

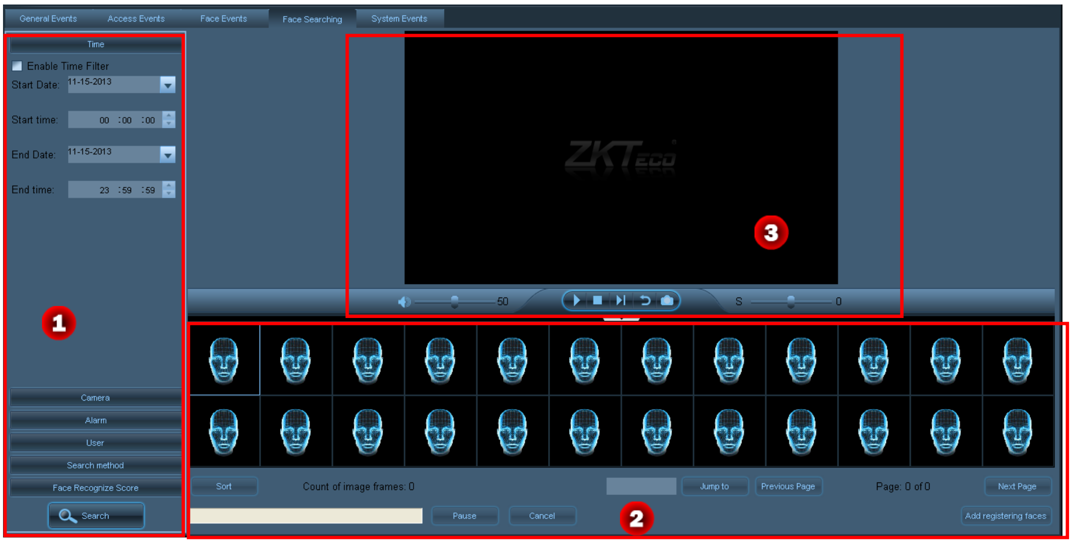
4.5.3.2 Log List

Note: The log list of face events is the same as that of common events. For details, see 4.5.1.2 Log List.

4.5.3.3 Playback window

Note: The playback window of face events is the same as that of common events. For details, see 4.5.1.3 Playback Window.

4.5.4 Face Searching



Area	Description
1	Log search panel
2	Face list
3	Playback window

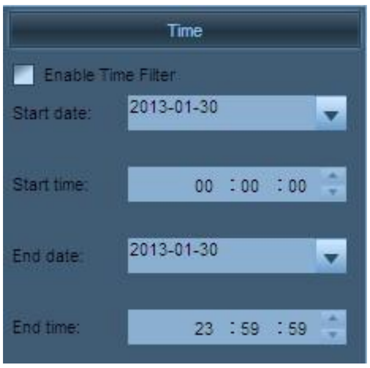
You can widely search for videos of all people that ever appear on the recording screen and specify query conditions to search for videos quickly and accurately, making face recognition to be applied more widely.

4.5.4.1 Log Search Panel

When searching for faces, you can specify multiple filter conditions: time, network camera, alarming mode, user, search method, and face recognition score.

Note: Search results are filtered based on multiple added filter conditions. If no filter condition is specified, all faces in videos of all devices on the current day are searched out by default.

- **Filter by time**



After selecting **Enable Time Filter**, you can set the start time and end time for log search.

✧ **Filter by camera**

After selecting **Enable Camera Filter**, you can select the network camera for log search.

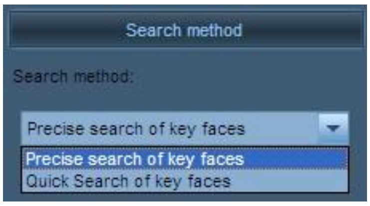
✧ **Filter by alarm**

After selecting **Enable Alarm Filter**, you can set the type of alarm logs for search.

✧ **Filter by user**

After selecting **Enable User Filter**, you can enter the user ID for log search.

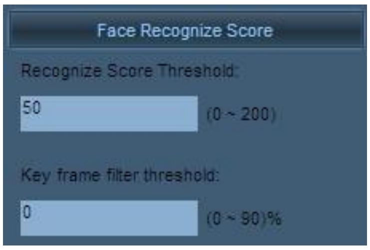
✧ **Filter by search method**



After you select **Precise search of key faces** from the drop-down list, all faces that ever appear in videos will be searched accurately and comprehensively.

After you select **Quick search of key faces** from drop-down list, faces that ever appear in videos will be searched quickly.

✧ **Filter by face recognition score**

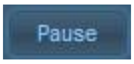


The value of **Recognize Score Threshold** affects the rate of faces that can be searched out. The larger the value is, the more accurately faces are searched and the fewer faces can be recognized. The default value is recommended.

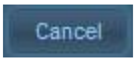
If **Key frame filter threshold** is set to a larger value, the system filters out faces with great similarities, and consequently fewer faces are searched out.

4.5.4.2 Face List

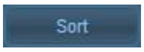
Face images that are searched out from videos are displayed in the face list.



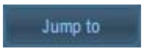
If it is clicked, face search is paused.



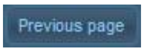
If it is clicked, face search is cancelled.



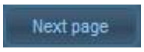
If it is clicked, search results are sorted by face recognition score in descending order.



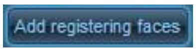
Enter a number in the box, and click the bottom to directly jump to this page.



If it is clicked, the search results on the previous page are displayed.



If it is clicked, the search results on the next page are displayed.

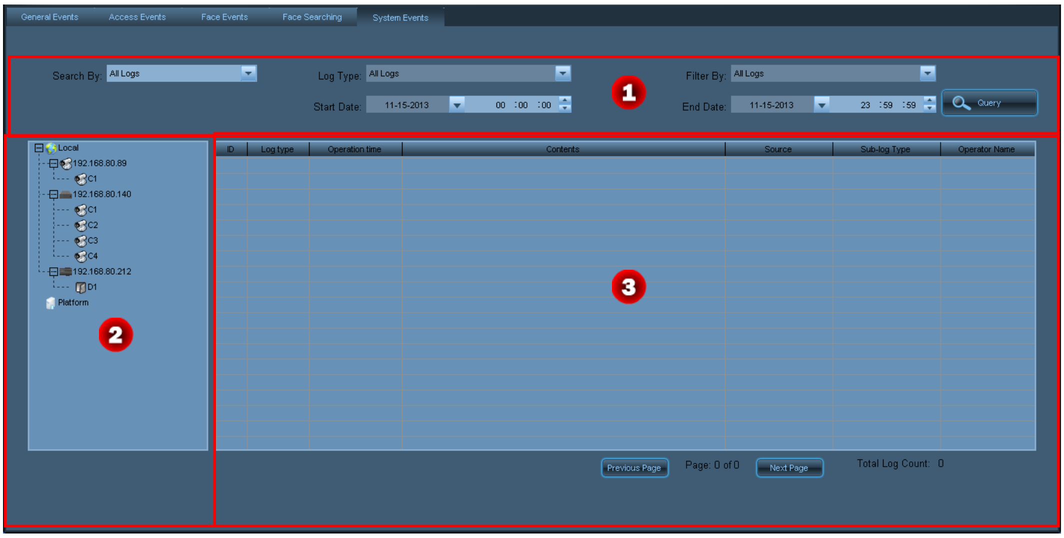


If it is clicked, selected faces will be added to the template of faces to be registered.

4.5.4.3 Playback Window

Note: The playback window of face search is similar to the playback window of common events. For details, see 4.4.1.3 Playback Window.

4.5.5 System Event



Area	Description
1	Log query panel
2	Device list/User list
3	Log list

Query mode: Query logs based on a specified type of data.

Query all logs: Query all logs of all devices.

Query based on device: Select a device from the device list to query its logs.

Query based on user: Select a user with operation logs from the user list.

<table>
<tr><th></th><th>Log Type</th><th>Description</th><th>Sub-log Type</th></tr>
<tr><td rowspan="18">All logs: Record all information of the system.</td><td rowspan="7">Operation log</td><td rowspan="7">Record all operation information of a user.</td><td>Network preview</td></tr>
<tr><td>Voice intercom</td></tr>
<tr><td>Guard</td></tr>
<tr><td>PTZ control</td></tr>
<tr><td>Remote setting</td></tr>
<tr><td>Time calibration</td></tr>
<tr><td>Others</td></tr>
<tr><td rowspan="7">Alarm log</td><td rowspan="7">Record the alarm information of a device.</td><td>Disk full alarm</td></tr>
<tr><td>Video loss alarm</td></tr>
<tr><td>Motion detection alarm</td></tr>
<tr><td>Hard disk read/write error alarm</td></tr>
<tr><td>Standard mismatch alarm</td></tr>
<tr><td>External alarm</td></tr>
<tr><td>Others</td></tr>
<tr><td rowspan="4">System log</td><td rowspan="4">Record information such as user login, logout and related information.</td><td>Login</td></tr>
<tr><td>Logout</td></tr>
<tr><td>Local settings</td></tr>
<tr><td>Others</td></tr>
</table>

Start date: Indicates the start time of a log search.

End date: Indicates the end time of a log search.

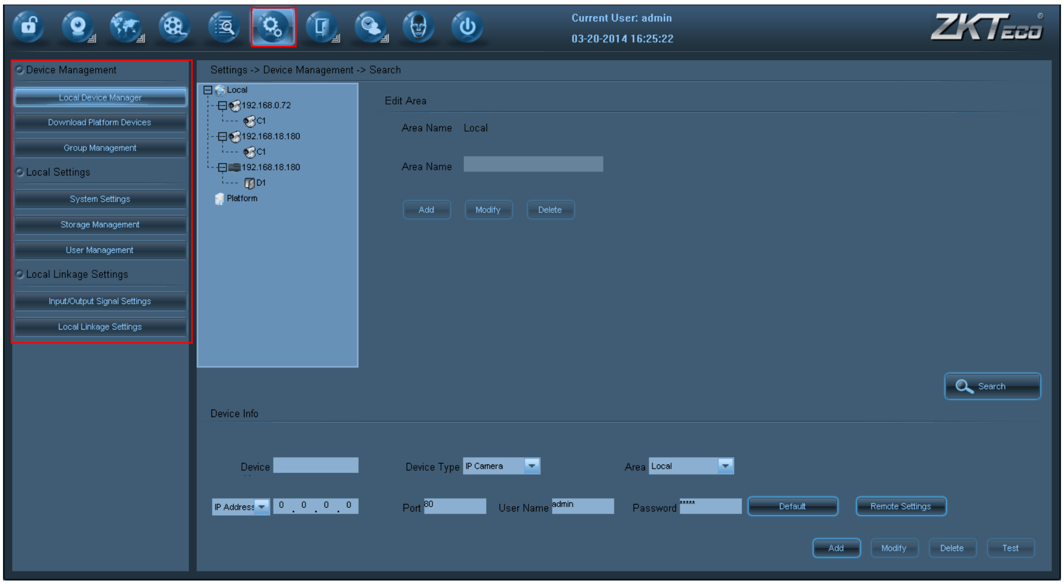
Query: Select a camera channel from the device list, or a user from the user list. Then set query conditions on the **Log query** panel and click the [**Query**] button. Eligible results are displayed in the log list.

Previous page: View the query results on the previous page.

Next page: View the query results on the next page.

Total log number: Indicates the number of all log query results.

4.6 Settings



The **Settings** menu contains 8 submenus and allows settings of multiple devices (for example, the IP cameras).

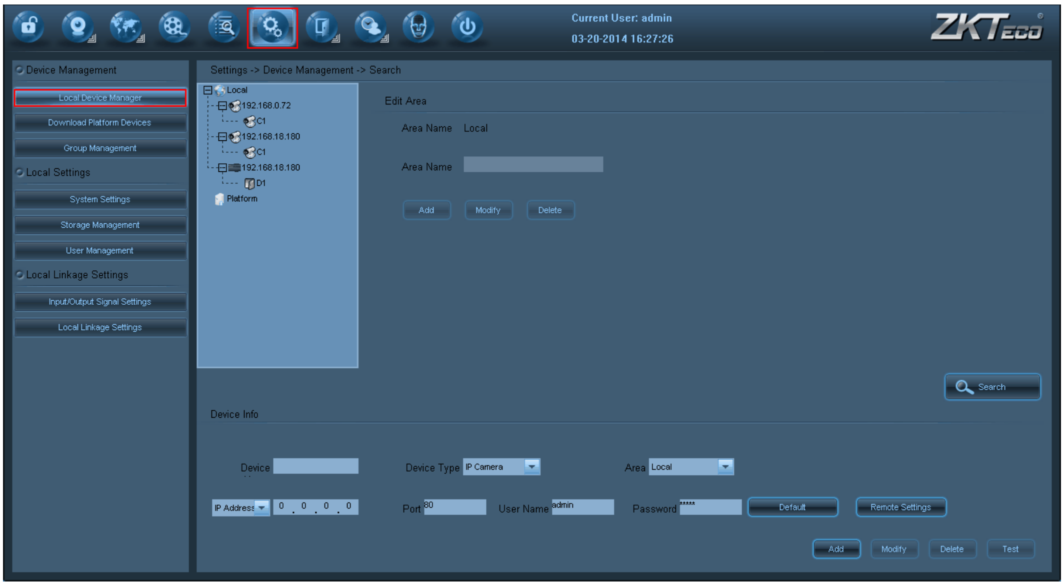
- **Common operations and icon functions in the Settings menu**

Camera selection: Select a channel in the device list by clicking the channel name. **Camera connection**: Connect a camera by double-clicking the channel name in the device list.

Icon	Function description
Add	Add devices/areas/groups/camera presets/cruise paths/users.
Modify	Save modified parameters or switch to modification state.
Delete	Delete existing devices/areas/groups/camera presets/cruise paths/users.
Apply	Synchronize the modified parameters with the remote device.

Reset	Restore the parameters to their values in the last saving.
Default	Restore parameters to their default values
Test	Test whether the device can be connected properly
Save	Save the modified information to local database
Cancel	Cancel modification
Duplicate	Copy the setting to other devices

4.6.1 Local Device Management



4.6.1.1 Area Management

● **Area Information**

Area name: The name of the upper level area of the currently chosen area.

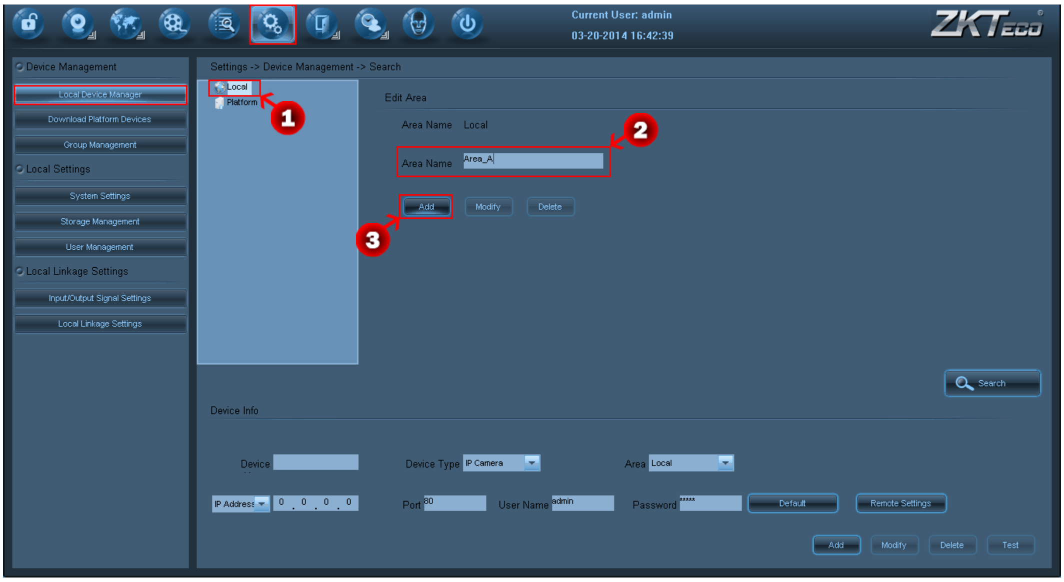
Area name: Areas that can be set.

➢ **Area Maintenance**

Add Area:

1. Click and select **Local** to enter the **Edit Area** window:

2. Enter **Area Name**(Unrepeatable), and then click [Add] button to add area, shown as the following figure:



☺**Remarks**: The area selected in **Step 1** (for instance, **Local**) is the parent area of the newly-added one.

Modification Area: Click **Area Name** to select an area, input a new area name in **Edit Area**, and then click the **[Modify]** button to save.

Deletion Area: Click **Area Name** to select an area and click the **[Delete]** button in **Edit Area** to delete the selected area.

✍ **Note:**

(1) When deleting areas, all devices under the corresponding areas will be deleted directly. Please operate with caution.

(2) The **Local** area is the default existence area and cannot be deleted.

4.6.1.2 Device Information Management

- **(Local) Device Information**

Device name: Device names displayed in the software. After the **Device name** is set, the device list displays only the device name rather than the device IP address.

Device type: Includes IP camera, access control device or NVR/DVR.

Select areas: The area where the device belongs to.

IP address/Domain name: The device cannot be connected successfully unless the device IP and domain name are consistent with that in the remote device.

Port: The device's communication port. The device cannot be successfully connected unless the device communication port is consistent with that in the remote device.

User name: The user name that used to visit the front-end device. The device cannot be successfully connected unless you enter a correct user name.

Password: The password that is used to access front-end device, and the device cannot be successfully connected unless you enter a correct password.

Default: The password is used as the default password for connections if **Default** is ticked.

Notes: (1) There are at most 128 areas can be added. **(2)** After device search is completed, the camera cannot videotape or capture images unless it is added to an area. An un-partitioned device cannot be used.

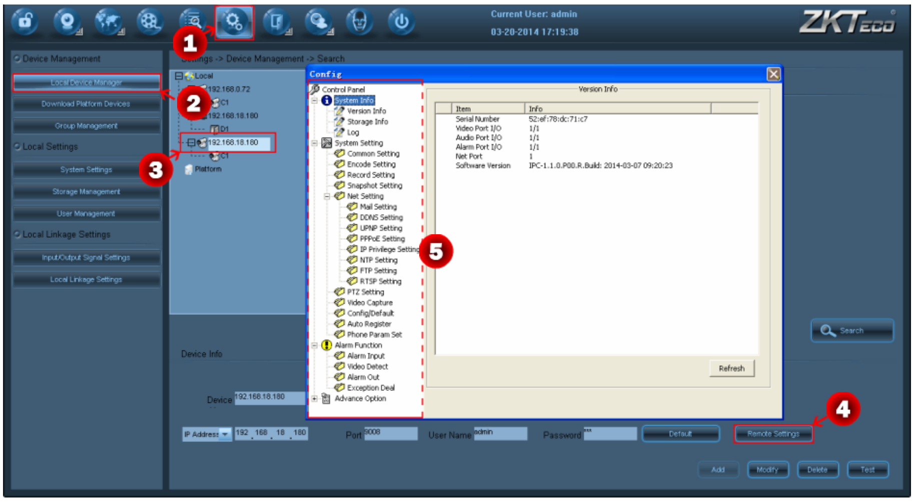
- **Remote Settings**

The **Remote Settings** interface is decided by device type. The final display interface is subject to the actual display interface

❍ **Type 1**

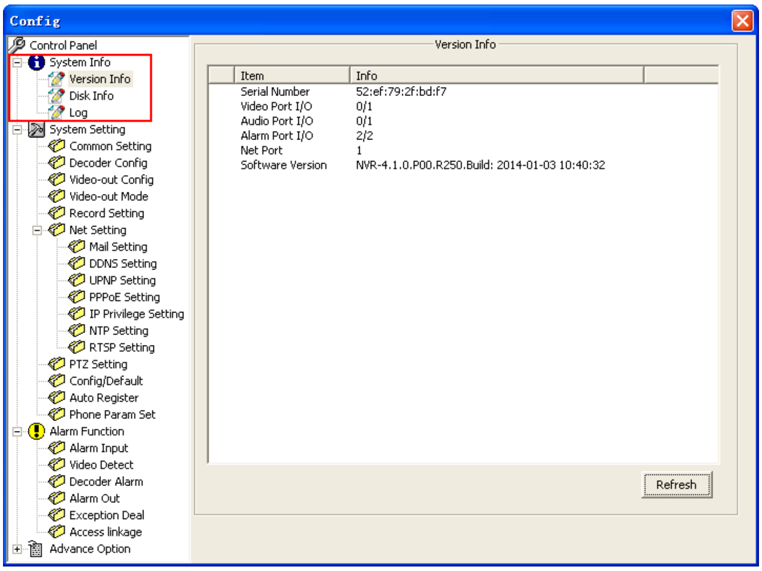
Click **Device Name** in the **Local Device List**, and then click 

button, the **Config** window will pop-up:



➢ **System Information**

Click **System Config**. The **Config** window is displayed, as shown in the following figure. You can set and modify all parameters of the NVR.



System Info: It allows you to view version information, disk information, and logs of the system.

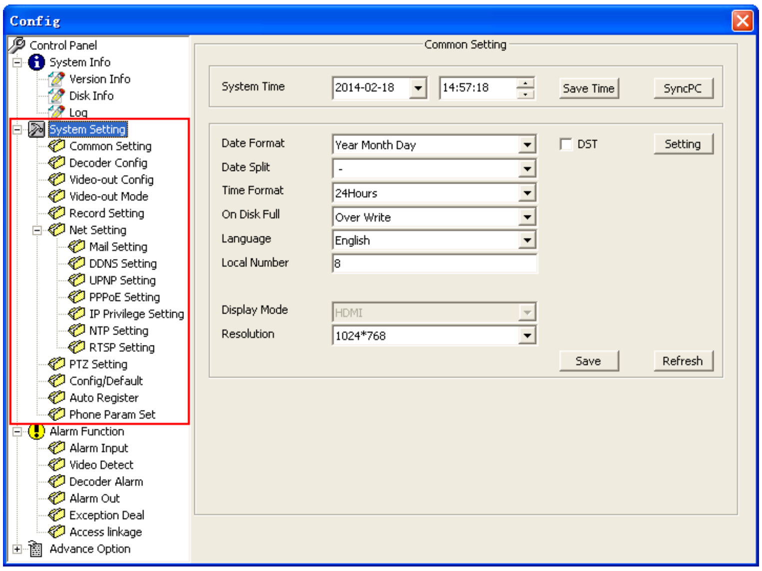
Version Info: It allows you to view the firmware version information and port information of the NVR.

Disk Info: It allows you to view the disk partitions, disk status, free space, and total space.

Log: It allows you to search for, view, and back up logs of the NVR.

- **System Setting**

You can set the NVR time, language, format, decoding mode, recording mode, serial port, network, alarm, video, PTZ, and backup parameters.



Common Setting: It allows you to set the video format and system time/date, synchronize the system time/date with that of the PC, select voice versions supported by the system, and set the handling methods when hard disks are full.

Decoder Config: It allows you to search for and add devices and set decoding policies for the channels.

Video-out Config: It allows you to adjust the top, bottom, left, and right edge spacing for video display.

Video-out Mode: It allows you to determine whether to display the time, channel, alarm state, and record state on a video.

Record Setting: It allows you to set the length of record files and pre-record time. The record dates and time periods are displayed in a graph based on record types (**Timer**, **Motion**, and **Alarm**).

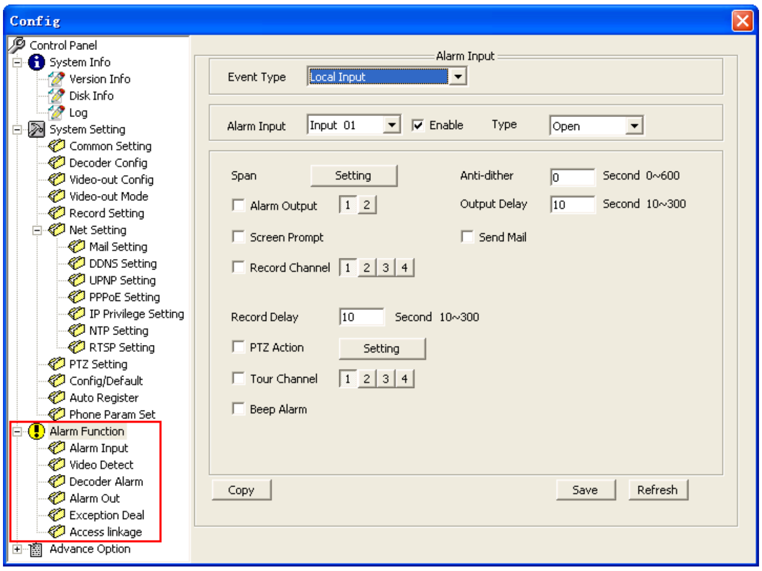
Net Setting: It allows you to set the device name, IP address, subnet mask, gateway, alarm reception mail box, DDNS, UPNP, PPPoE, IP privilege, NTP, and RTSP.

PTZ Setting: It allows you to set the channel connected to the PTZ, PTZ protocol, PTZ address, baud rate, data bits, stop bits, and parity. The default values are as follows: **PELCOD**, **1**, **9600**, **8**, **1**, and **None**.

Config/Default: It allows you to restore all or part of the default values. You can restore the alarm setting, record setting, motion detection setting, serial port setting, output mode setting, exception handling mode, name setting, network setting, alarm setting, PTZ setting, and channel name. You can export or import configuration parameters.

AutoReg: It allows you to set the connection mode of the platform to be registered, IP address and port ID of the server, user name and password for accessing the platform, and unified device identifier.

➢ **Alarm Function**



Alarm Input: It allows you to set the event types for alarm input, alarm time, anti-dither time, output channel, PTZ action, and beep alarm.

Video Detect: It allows you to set motion detection areas in a channel and configure actions with alarms.

Decoder Alarm: It allows you to set actions with decoder alarms.

Alarm Out: It allows you to set the display of the alarm output status.

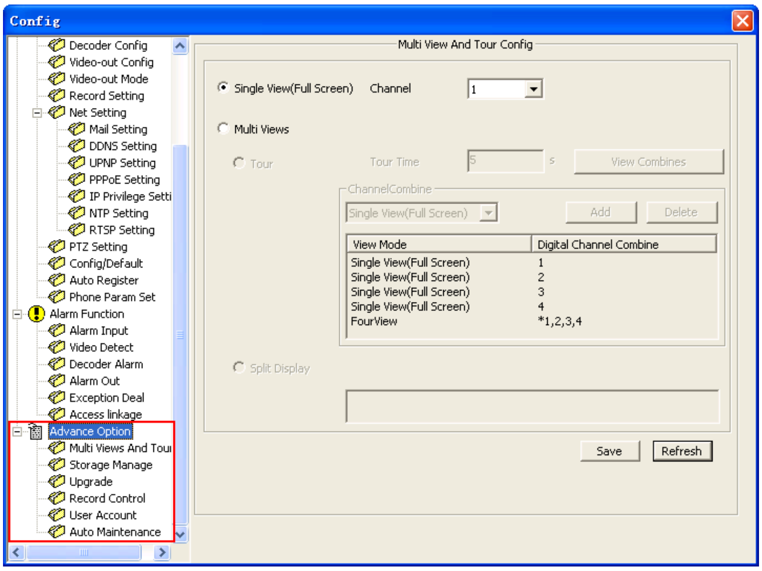
Exception Deal: It allows you to set the exception event types, alarm delay, and exception handling methods, for example, screen prompts, emails, and beep alarms.

Access linkage (optional): Set the following items: **Alarm Input**, **Span**, **Anti-dither**, **Alarm Output**, **PTZ Action**, **Beep Alarm**, **Tour Channel**, and **Snapshot**.

Note: Access event records and pictures are generated by means of access linkage. Access Function is optional and available only to some NVRs. To enable the function on your devices, please consult our commercial representatives or pre-sale technical support engineers.

- **Advance Option**

You can set record and maintenance parameters.



Multi Views and Tour: It allows you to set single-screen or multi-screen display and configure multi-screen tours.

Disk Manage: It allows you set the read/write, read only, and redundancy properties for hard disks, clear data, and recover hard disks from errors.

Upgrade: It allows you to upgrade the system by using a local upgrade file.

Record Control: It allows you to the recording mode to **Always**, **Config**, or **Close** for all channels or part of the channels.

User Account: It allows you to ad users, modify users, delete users, modify passwords, add groups, modify groups, and delete groups.

Auto Maintenance: It allows you to set the restart time for maintenance and determine whether to delete old files.

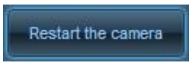
Note: The detail of procedure, please see the *Web Server User Manual*, which is available on the disk delivered with the software.

❍ **Type 2**

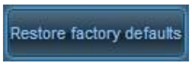
Click **Device Name** in the **Local Device List**, and then click 

button, the following **Remote Settings** window will pop-up:

■ **Device Information View**

Click 

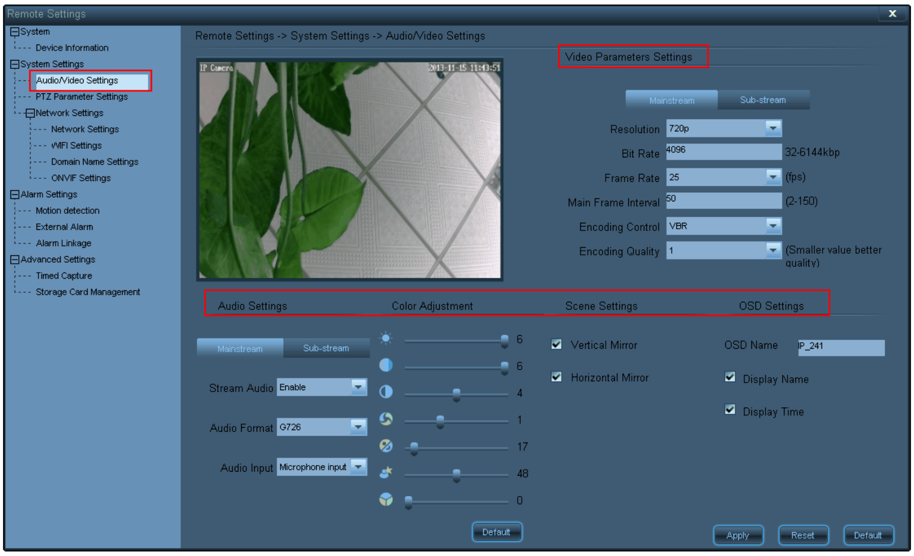
to restart the camera.

Click 

to restore the camera parameters to its factory defaults.

■ **Audio and Video Parameter Settings**

Click the **Audio/Video Settings** menu on the **Remote Settings** window to enter the **Audio/Video Settings** window, shown as below:



✧ **Video Parameter Settings**

Resolution: Resolution is a standard to measure the image definition (unit: pixels). The higher the value is, the clearer the image is.

The main stream definition of HD cameras is 720P (1280*720 pixels), and the secondary stream definition is QVGA (320*420 pixels). For the main stream definition of HD cameras, you can choose one from D1, CIF, and QCIF. For the secondary stream definition of HD cameras, you can choose one from CIF and QCIF. D1 image resolution: 704*576 pixels, CIF image resolution: 352*288 pixels and QCIF image resolution: 176*144 pixels.

Bit rate: Indicates the transmission of data traffic per second. Generally bit rate is the multiple of 128 Kbit/s. The higher the bit rate is, the clearer the definition is. You can set an appropriate bit rate based on the network condition.

Frame rate: indicates the number of pictures displayed on the screen per second. Frame rate can be set, and the higher the frame rate is, the better the video effect is. Generally, a frame rate that exceeds 24 frames per second is called all real-time images.

Main frame interval: An image would be used as the main image in video compression. The rest images will be compared with this one and only the different images will be saved. When videotaping scenes with fast moving objects, shorten the frame interval to avoid blurred streaks or motion blur. When videotaping scenes with slow moving objects, lengthen the frame interval to reduce the data volume and improve the compression ratio.

Video coding control: You can select **Fixed stream** for a scenario in which surveillance activities are gentle, and the video encoder shall encode as the stream velocity set in the stream settings. You can select **Variable bit rate** for a scenario in which surveillance activities are intense, and the video encoder can operate at a variable bit rate without losing image quality. Encode based on the set stream velocity, but the encoding will not follow this velocity completely. **Video encoding quality** You can choose any video encoding quality from 1 to 6. The smaller the value is, the better the image quality is, and the greater the stream control is.

✧ **Audio Parameter Settings**

Audio acquisition Enable: indicates that transmitting audio signals is available. **Disable** indicates that transmitting audio signals is unavailable.

Audio format: You can choose G711 or G726 as the audio format.

Format	**Code rate**	**Sound quality**	**Application condition**
G711	Larger	Higher	The network is in good condition
G726	Medium	Intermediate	The network is in intermediate condition

Audio input mode: When a microphone is functioned as the external audio acquisition device, choose **Microphone input** to use an external amplification device to amplify the audio signal because the microphone has a low output power. When the recording volume and the output power of the audio acquisition device are high, choose **Linear input** to get a better recording effect.

✧ **Color Adjustment**

See the **Color Adjustment panel** in 4.1.4 Control Panel for details.

✧ **Scene Settings**

Image up/ down rotation: Select it to rotate the image up and down. This is only for HD cameras.

Image left/right rotation: Select it to rotate the image right and left. This is only for HD cameras.

✧ **OSD Settings**

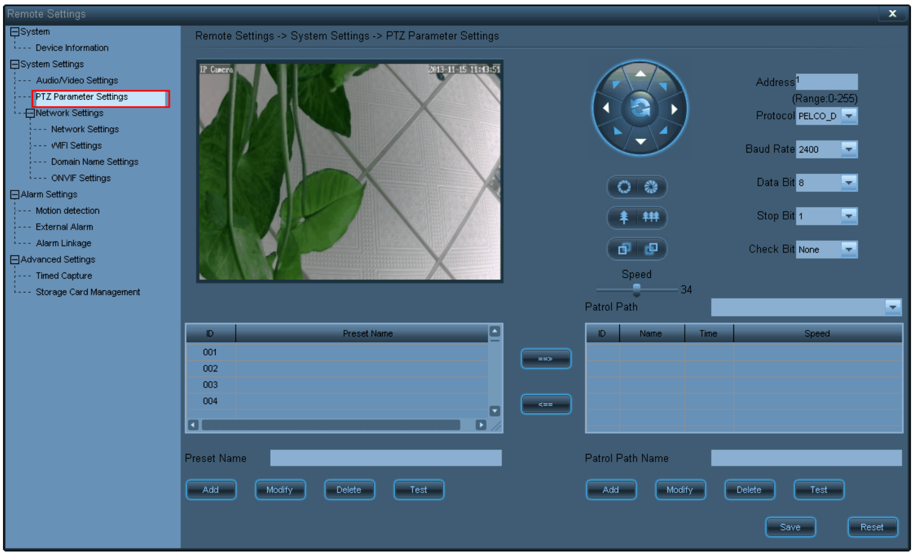
Name Overlap: Select it to overlap the camera name to the upper left corner of the video.

Time Overlap: Select it to overlap the camera time to the upper right corner of the video.

OSD name: The camera name, with a maximum number of characters of 17 that can be entered.

■ **PTZ Parameter Settings**

Click the **PTZ Parameter Settings** menu on the **Remote Settings** window to enter the **PTZ Parameter Settings** window, shown as below:



✧ **PTZ Control**

See the **PTZ control** panel in 4.1.4 Control Panel for details.

✧ **Pan-tilt Settings**

Address code: It is used to distinguish various pan-tilts. The address code of the pan-tilt can be modified by using pan-tilt internal code. Please set the address code to match it with the pan-tilt address code.

Protocol: You can choose PELCO-D or PELCO-P as the communication protocol of pan-tilt motor control. This protocol must be consistent with the pan-tilt internal control protocol.

Baud rate: For the transmission frequency of RS-485 signal, the higher the baud rate is, the faster the transmissions speed is, and the error rate rises accordingly. The baud rate must be consistent with that of the internal pan-tilt.

Data bits, stop bits, and **calibration:** The transmission parameters of RS-485 protocol must be consistent with that of the internal pan-tilt.

Notes: **(1)** Due to different production standards of manufactures, when the incomplete match of the address codes occurs, try to add 1 or minus 1 to implement complete match. **(2)** For pan-tilt related parameters, see ***Pan-tilt User Manual***.

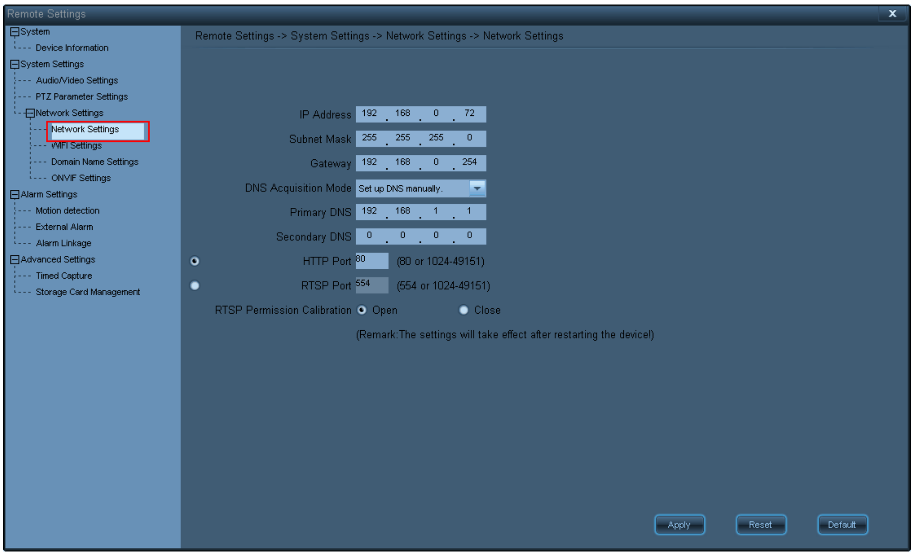
✧ **Preset and Cruise**

When the motion pan-tilt arrives at the place you focused on. Click and choose the preset number in the preset list. Set the preset name and click [**Add**] to add the preset**.**

After adding two or more presets to the camera channel, you can configure a cruise based on the presets.

After setting the cruise, click [**Add**] to add a cruise. Click and select a **Preset** in the preset list, Select the cruise that will be added to from the drop-down list, click ==> to add this preset to the selected cruise. Click and choose the unnecessary preset. Click <== to delete it from the cruise. After saving the cruise path, click [**Test**] to test the cruise path.

■ **Network Settings**



IP address: The default IP address is 192.168.1.88. It can be modified as needed.

Subnet mask: The default subnet mask is 192.168.1.88. It can be modified as needed.

Gateway: The default gateway is 192.168.1.1. It needs to be reset if the device and the PC are not in the same network segment.

DNS acquisition mode: Domain Name Server (DNS) can translate the domain name into an IP address. In **Manually set the DNS** mode, you need to enter the primary and secondary DNS addresses manually. When select **Automatically obtain the DNS**, the DNS address will be obtained automatically when the camera is connected with the LAN.

Primary DNS: The primary DNS is 192.168.1.88 by default. It can be modified as needed.

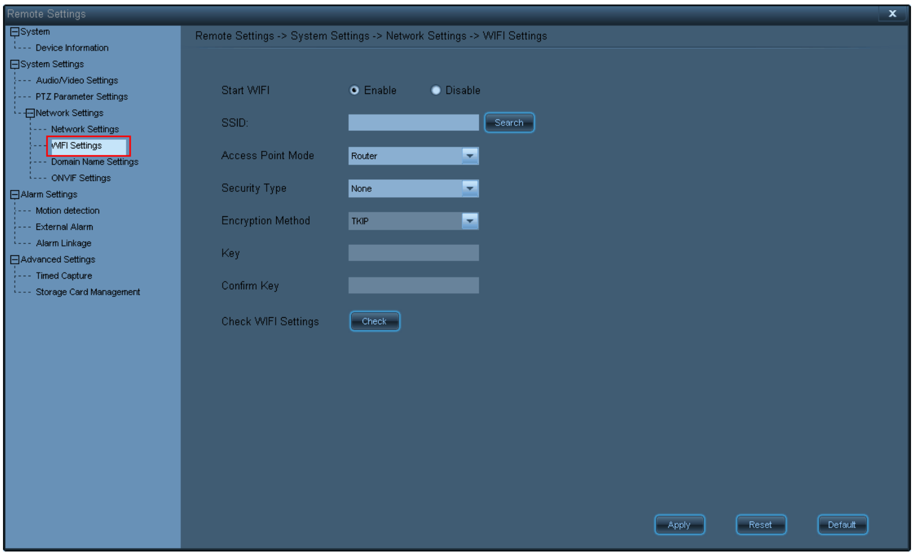
Secondary DNS: The system will connect the secondary DNS when the connection failure or error of the primary DNS occurs.

HTTP port: The device port number is 80 by default. To modify it, contact the network administrators or network professionals. The camera will restart after the port is successfully modified.

RTSP Port: 554 by default. If a player that supports RTSP Protocol is needed to connect the device and play videos, input the URL address ***rtsp://IP address/stream code***. If the RTSP port is modified, input ***rtsp://IP address: port/stream code***. The device is restarted after successful modification of the port.

Parity If you select ***Open***, you need to login to connect the device when using a player that supports RTSP Protocol; if you select ***Close***, you do not need to login.

✧ **Wi-Fi Settings**



Start Using Wi-Fi: Select ***Enable*** to allow Wi-Fi connection; select ***OFF*** to disable Wi-Fi connection.

SSID: is the login name (case sensitive) for WLAN authentication. Only users who pass authentication can access Wi-Fi. Click [**Search**], and a Wi-Fi webpage will pop up to list all available Wi-Fi.

Access Point Mode: includes two options. ***Router*** mode corresponds to a star structure network, and ***Point-to-point*** mode corresponds to a point-to-point peer-to-peer network. Select a network in the Wi-Fi search results to automatically obtain the access point mode of the network.

Security Type: is set in the router, including five types: none, WEP64, WEP128, WPA-PSK and WPA2-PSK. Select a network in the Wi-Fi search results to automatically obtain the security type of the network.

Encryption Method: is used for wireless connection, including TKIP and AES. Select a network in the Wi-Fi search results to automatically obtain the encryption method of the network.

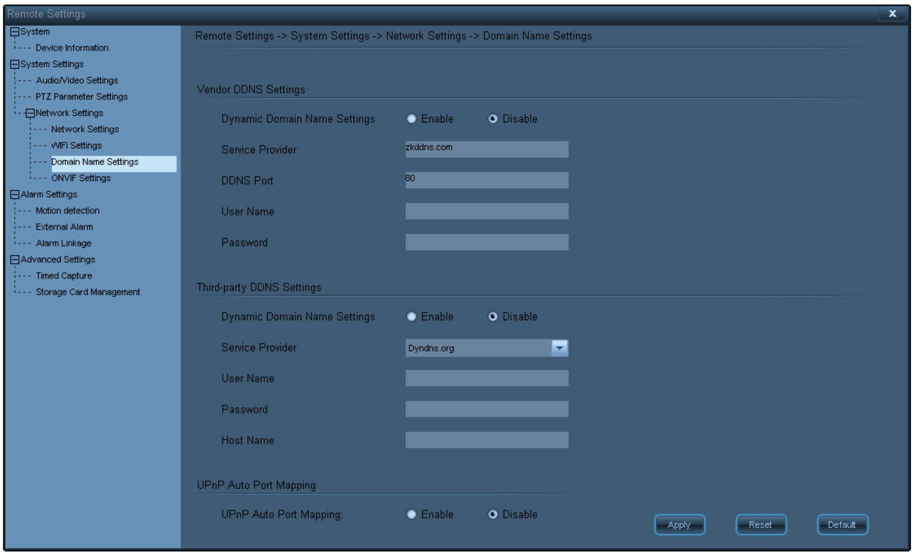
Key: Input the key if it is set in the router.

Confirm Key: Input the key again to confirm.

Check Wi-Fi Settings: Click [***Check***] to check whether the Wi-Fi settings are correct.

Notes: **(1)** Only a device with built-in wireless module can support Wi-Fi connection. Before configuring the Wi-Fi network, please verify whether the device has the built-in wireless module. **(2)** When the device is connected with a network cable and enables Wi-Fi connection, wired connection is the first choice when the device is started. If wired connection fails, wireless connection is selected. The IP address and port for wireless connection are the same as those for wired connection. **(3)** To ensure network security, it is strongly recommended the security settings be enabled and that the encryption method of WPA-PSKWPA2-PSK AES be used. **(4)** Please see the ***WEB Server User Manual*** > 4.11 How to Configure Wi-Fi.

✧ **Domain Name Settings**



Register a domain name for use in constantly IP changing environment such as ADSL.

After Dynamic Domain Name Settings are enabled, select the **Service Provider** that provides DDNS service, and input the service provider's user name and password applied in the server.

◆ **Vendors DDNS Settings**

Dynamic Domain Name Settings: Click **Enable** to enable Vendors DDNS; click **OFF** to disable Vendors DDNS.

Service Provider: Provides DDNS service.

DDNS Port: Is 80 by default, and cannot be modified if Vendors DDNS is used.

User Name: Is the service provider's user name applied in the server.

Password: Is the service provider's password applied in the server.

◆ **Third-party DDNS Settings**

Dynamic Domain Name Settings: Click ***Enable*** to enable Third-party DDNS; click ***OFF*** to disable Third-party DDNS.

Service Provider: provides DDNS service. ***Dyndns.org***, ***3322.org*** and ***Dynddns. us*** are supported.

User Name: is the service provider's user name applied in the server.

Password: is the service provider's password applied in the server.

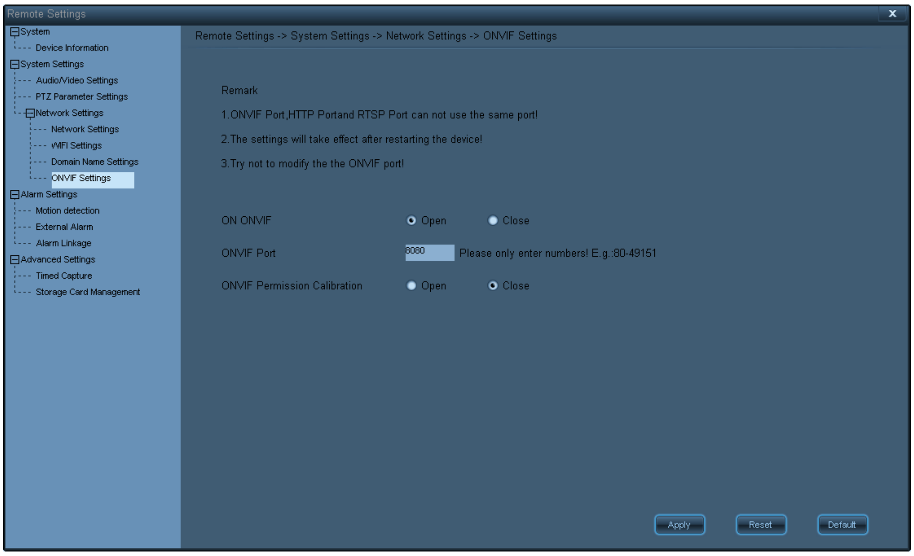
Host Name: is the domain name assigned in the server.

◆ **UPnP Port Mapping**

UPnP Port Mapping: UPnP refers to **Universal Plug-n-Play**. If UPnP is enabled, the device automatically communicates with the router in the LAN upon being connected to the LAN, and makes the router open a port to map with its port. So you do not need to login the router for port mapping.

Notes: **(1)** To use the UPnP function, first confirm UPnP is enabled in the router. **(2)** Because routers have various models, not all of them can support UPnP well. Please test whether UPnP can work with the matched router. Otherwise, UPnP is not recommended. According to the current test, UPnP can work well with the TP-LINK router.

✧ **ONVIF Settings**



Our network surveillance device supports the ONVIF function. Once the function is enabled, the client software that supports ONVIF Protocol can be used for monitoring, recording and PTZ control of the network surveillance device.

ON ONVIF: Select ***Open*** to enable ONVIF; select ***Close*** to disable ONVIF.

ONVIF Port: is ***8080*** by default. Please do not modify the ONVIF port if not necessary. The device is restarted after successful modification of the port.

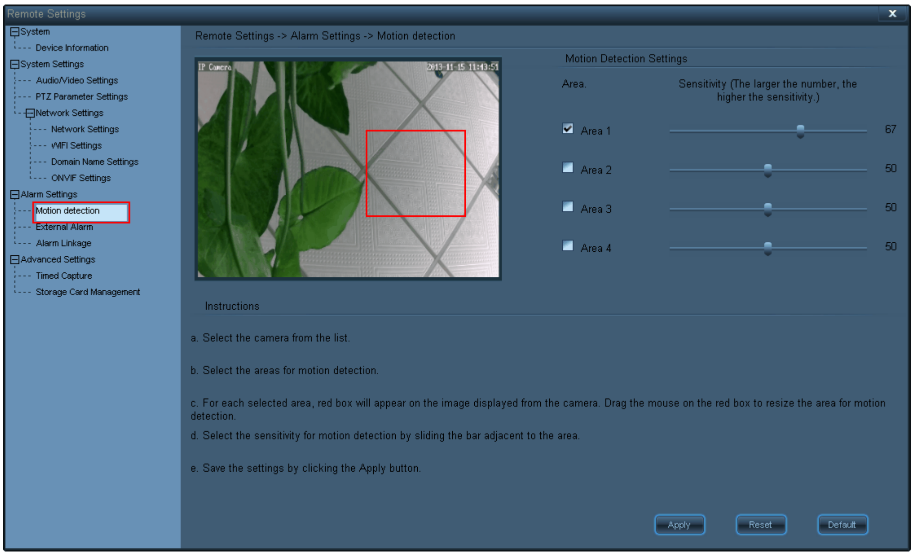
ONVIF Permission Calibration: If you select **Open**, you need to login to connect the device when using the client software that supports ONVIF Protocol; if you select **Close**, you do not need to login.

Notes: **(1)** ONVIF port, HTTP port and RTSP port shall not be the same! **(2)** ONVIF settings take effect after the device is restarted.

■ Alarm Settings

Double-click a camera channel in the device tree, and set the audio and video parameters after connection.

✧ Motion Detective



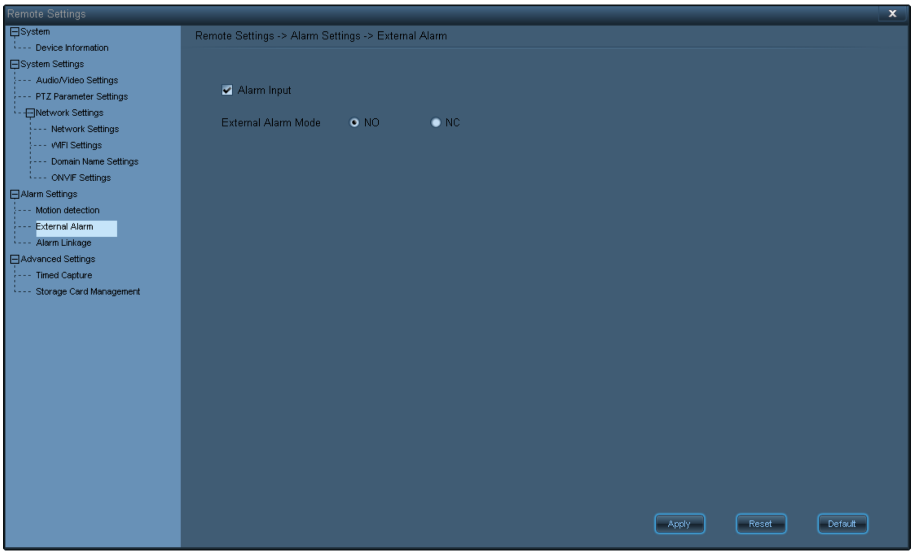
To monitor a specific area and ensure the alarm can be automatically activated when abnormal motion occurs, you can select and activate motion detection. Double-click the camera channel in the device tree and set the motion detection of the camera after connection. The camera supports 4-motion-detection-area setting. Tick off the option box on the right side of the interface to activate the corresponding options.

Detection area: Tick off the option box on the right side of the interface to activate the corresponding options. The 4-motion-detection-area setting is supported on the camera.

After an area is activated, the area box and the area number will be displayed on the screen. Move the mouse into the area box. Left-click the mouse to drag the area box into any place on the image. You can also move the mouse to the lower right corner of the area box. Left-click the mouse to adjust its size.

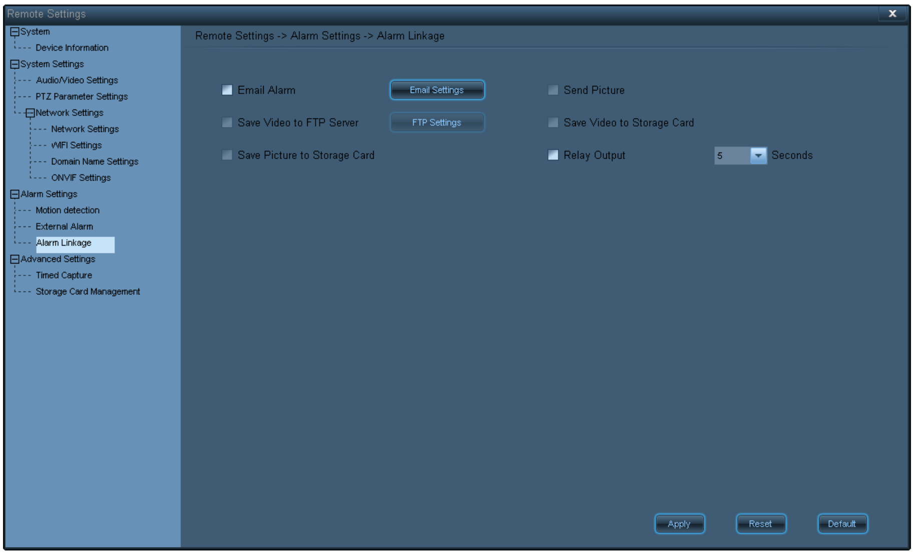
Sensitivity: The sensitivity ranges from 0 to 100. The larger the number is, the higher the sensitivity is.

✧ External Alarm



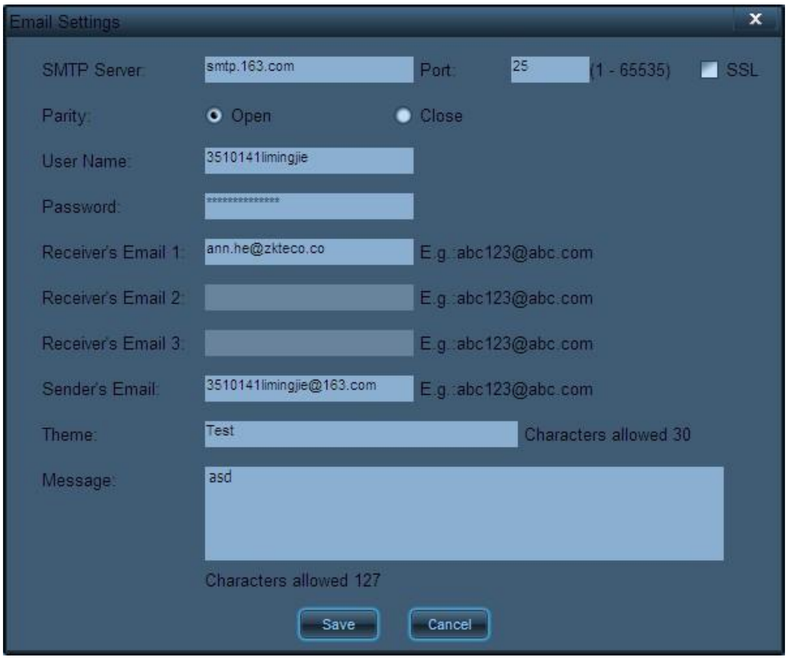
If the device is equipped with an external alarm input device, check **Alarm Input** to enable external alarm input. If the alarm input device is a normally open device, select ***NO***; if the alarm input device is a normally close device, select ***NC***.

✧ **Alarm Linkage**



Once an alarm is triggered, several modes of alarm are available:

Email Alarm: is to send an alarm email to the preset mailbox; click **Email Settings** to enter the Email Settings interface.



SMTP Server: is the IP address of SMTP server. See your mailbox settings for details.

Port: Is 25 by default. To modify the port, please contact your network administrator or consult professionals.

SSL: Check the option to enable secure connection. See your mailbox settings for details.

Parity: If you select **Open**, you need to input the user name and password for communications upon successful authentication; if you select **Close**, you do not need to input the user name and password for authentication.

User Name: is the name of email.

Password: is the password of email.

Receiver's Email: is the email address to receive alarm emails. Please input at least one address.

Sender's Email: is the address displayed in the alarm emails.

Theme: is the subject of the alarm emails.

Message: is the content of the alarm emails and only supports English input.

Notes: (1) The SMTP server should support POP3 Protocol. Because may mail servers disable this protocol to strength security and reduce spam mails, you need to verify whether your selected SMTP server supports POP3, or email sending may fail. **(2)** Check the SSL option for some mail servers with SSL certification. **(3)** Set correct DNS in the ***Network Settings*** interface to send emails successfully.

Send Picture: is to send captured pictures to the preset email.

Save Video to FTP Server: is to transmit video caches in the storage card to the FTP server (only available if the storage card is inserted); click **FTP Settings** to enter the FTP Server Settings interface.

FTP Server: is the IP address or domain name of FTP server.

Port: Is 21 by default. To modify the port, please contact your network administrator or consult professionals.

User Name: is the user name applied in the FTP server.

Password: is the password applied in the FTP server.

Passive Mode: Data connection is initiated by the client program under this mode. Select **Open** to open the passive mode; select **Close** to close the passive mode.

Path: Add any subfolder path in the FTP server (the subfolder must be created in the FTP server in advance).

Test FTP Settings: Click **Test** to see whether the FTP server can be successfully connected.

Note: To use the FTP function, apply for a user name and password in the FTP server and for a storage space. The user must have permission to write in and create a subdirectory in the storage space.

Save Video to Storage Card: Record a 30s video and save it to the storage card (including a 5s clip before the alarm).

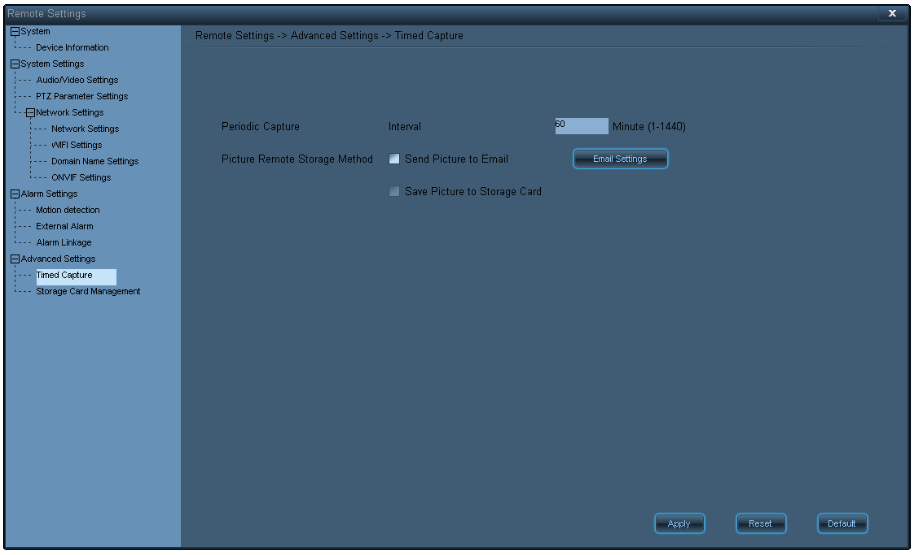
Save Picture to Storage Card: Save snapshot pictures to the storage card.

Relay Output: Close the relay to enable alarm output. The optional alarm durations are 5s, 10s, 20s or 30s.

Note: The function of **Save Video to FTP Server** can be enabled only when the storage card is inserted into the device, and the function of **Save Video to Storage Card** is enabled at the same time.

■ Advanced Settings

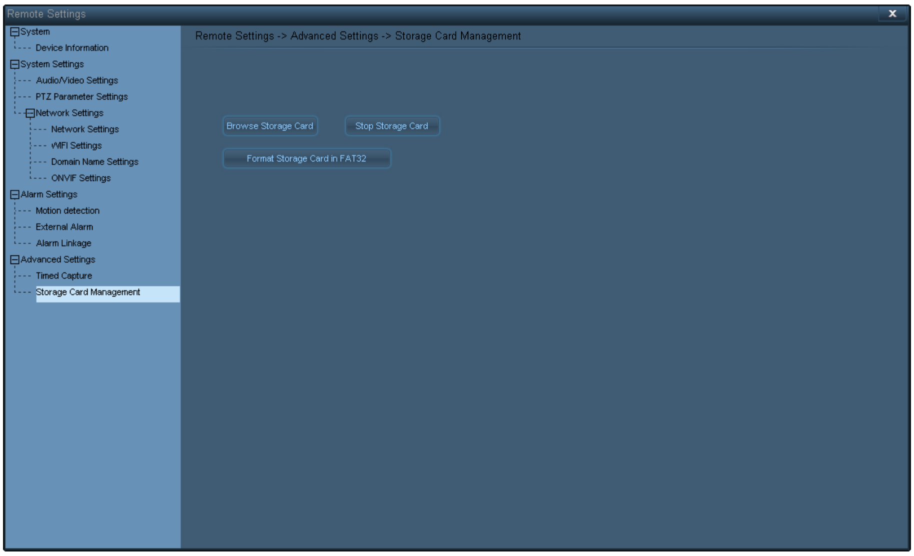
✧ Timed Capture



Periodic Capture: Set an interval for timed capture.

Picture Remote Storage Method: Check ***Save Picture to Storage Card*** to save captured pictures to the storage card; check ***Send Picture to Email*** to send captured pictures to the preset email.

✧ Storage Card Management



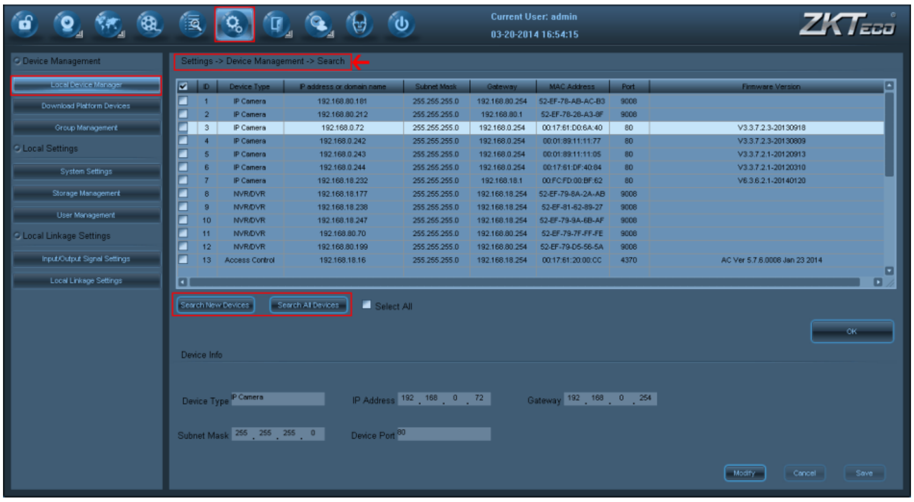
Storage Card Management: Click ***Browse Storage Card*** to browse the storage card on the device; click ***Stop Storage Card*** to stop the storage card; click ***Format Storage Card by FAT32*** to format the storage card.

Note: The system supports the storage card up to 32G. Please format the storage card to FAT32. Storage cards made by some manufactures may not be compatible with the device. Please test the storage card before usage.

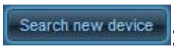
4.6.1.3 Add Device

Click 

button to enter the **Search** interface:



: Search all devices over the LAN.



: Search new devices over the LAN.

: Select all devices in the search list.

☺**Note**:

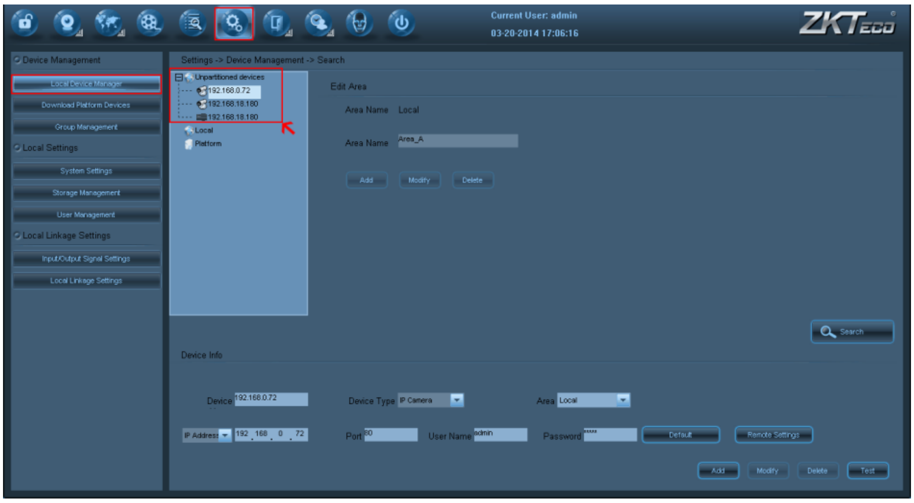
(1) BIOCAM can meet the demands of video surveillance, attendance management, and Access management simultaneously. To better meet the demands of distinguishing and selecting device function types, two device records will be displayed in the device list of the **Device Search** interface after connecting BIOCAM to LAN. And the device types are "*IP camera*" and "*Access Control*" respectively (The IP addresses of the IP camera and the Access device are the same while their ports are different.) If you need to use the function of video surveillance in BIOCAM, add devices of the "IP camera" type; if you need to use the function of attendance management and Access management in BIOCAM, add devices of the "Access Control" type.

(2) The two device records in BIOCAM found in the device search interface are continuously displayed in the device list of the interface; in this way, users can check and select easily.

➢ **Adding Devices to the Software**

1. Among the device lists found out, tick and select the devices needed to be added to the software (multiple options allowed).

2. Click the **[OK]** button to return to the **Local Device Manager** window. And then the selected devices will be displayed in the list of "Unpartitioned devices" as shown in the following figure:

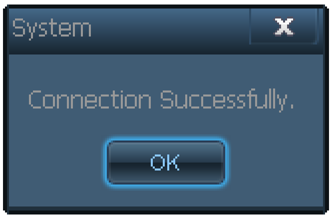


Then the **Device Information** column will show the relevant selected information including **Device Names**, **Device Types**, **IP addresses**, **Ports**, and **User names**.

Selection Area: Click the button  and select areas to which the devices belong in the drop-down list. (For more details about the area settings, please refer to the area maintenance in 4.6.1.1 Area Management.)

Password: Input the device communication password. Devices will be connected successfully and added only when the password is correct. (You can click **[Default]** to set this password as the default device password.)

3. Click the **[Test]** button to check if it can be connected to devices successfully. Only when devices are successfully connected, they can be added to the software.



4. Click the **[Add]** button to add the selected devices to this software.

☺**Remarks:**

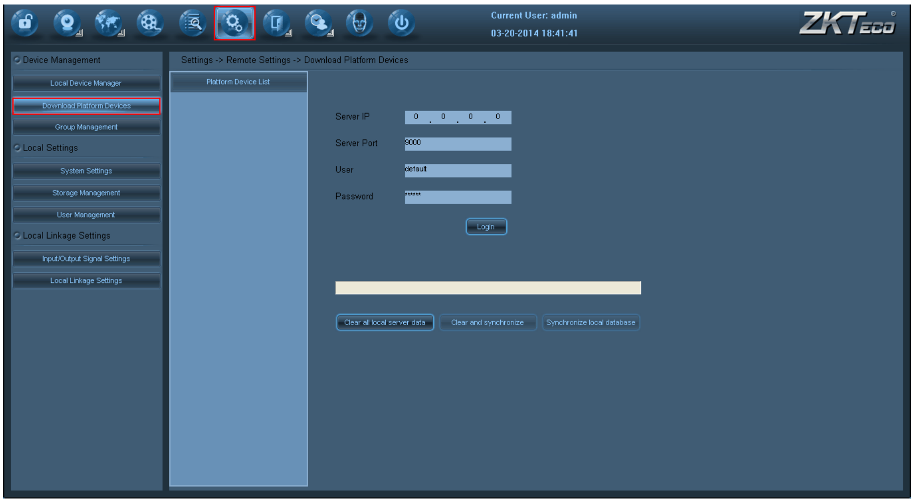
(1) When the added device type is "Access Control", click the **[Add]** button and a prompt will be displayed as shown in the following figure:

(2) Click **[Yes]** to delete all the data in this device and add the device to this software; click **[No]** to save all the data in this device and add the device to this software.

After successfully adding devices, you can change IP addresses, gateways, subnet masks or ports where necessary and click the **[Modify]** button to save.

Note: For information regarding to device remote parameters (IP address and port) modification, see 5.5 Modify Network Parameters of a Camera.

4.6.2 Platform Devices Download

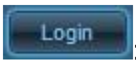


Server IP: is the IP address of CMS server.

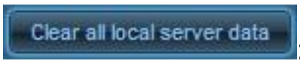
Server Port: is the port of CMS server.

User Name: is the name of CMS operator with permission to access the client.

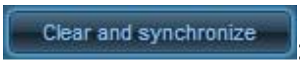
Password: is the operator's password.



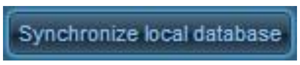
: Click the button to login the CMS server after inputting correct server information.



: Click the button to clear all local server data, including the platform device tree and related linkage information.

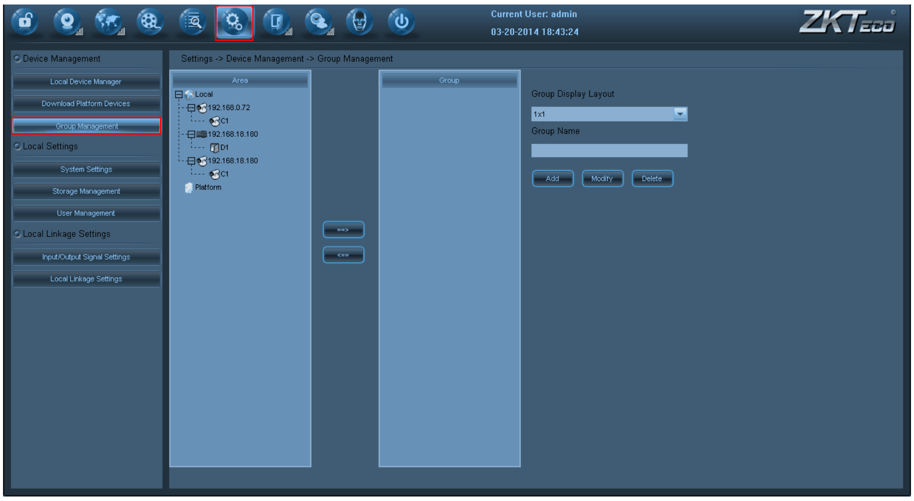


: Click the button to clear local server data and synchronize server data locally, which is applicable for logging in different servers to obtain different device trees.



: Click the button to synchronize server data directly and locally, which is applicable for logging in the same server to update data.

4.6.3 Group Management



Group type: Choose group type (according to picture quantities). The number of images and includes 1-image, 4-image, 5-image, 6-image, 8-image, 9-image, 16-image, 17-image, 19-image, 22-image, and 36-image.

Group name: Set group names.

Click a channel to be grouped in the device list. Then, click a group in the group list and click 

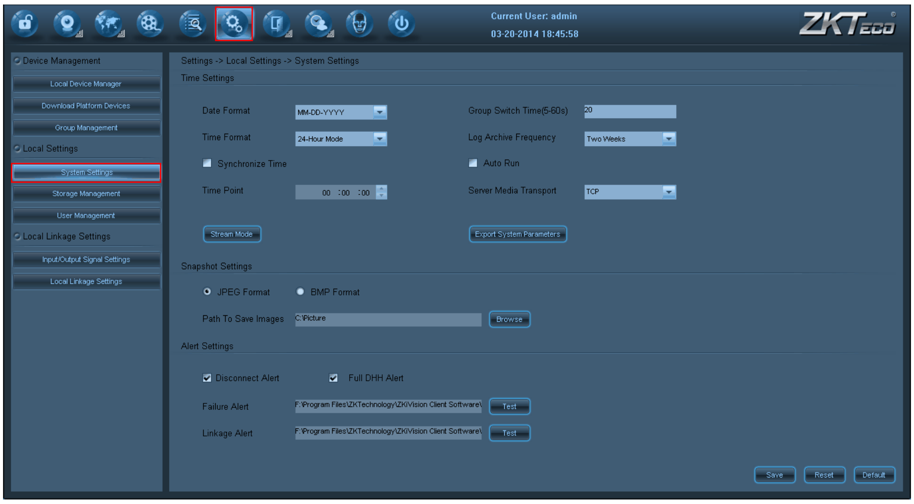
to add the channel to the group.

Click a channel to be deleted in the group list and click 

to delete the channel from the group.

Notes: (1) The device only can be operated after partition. **(2)** There are at most 20 groups can be added.

4.6.4 System Settings



✧ **Time Settings**

Date format It includes year-month-day, month-day-month, or day-month-year. The default format is year-month-day.

Time format: It includes 12 hours or 24 hours. The default format is 24 hours.

Auto-calibration time: Select it to calibrate the time of all connected devices during the given time, that is, synchronize the time of all devices with the PC.

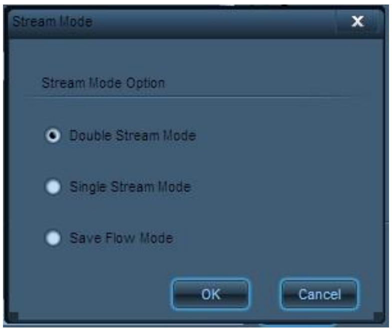
Auto-calibration time: Calibrate the time automatically.

Group switch time: The time interval of group switching. The group switch time is 20s by default. It can be set from 5s to 60s.

Log storage time: The logs can be saved for a week, two weeks, or a month. The default storage time is a week.

Auto run: The software automatically starts upon computer startup after this option is selected.

✧ **Stream Mode**



Double Stream Mode: When the preview window displays screens of multiple channels, the watched video, snapshot, and recorded video are sub-stream images. If you double-click one video for magnification, the watched video, snapshot, and recorded video are all main stream images.

Single Stream Mode: If sub-stream image is set in the video recording setting, the watched video, snapshot, and recorded video are sub-stream images; if main stream image is set in the video recording setting, the watched video, snapshot, and recorded video are main stream images regardless of whether videos of one or more channels are displayed in the preview window.

Save Flow Mode: When the preview window displays screens of multiple channels, the watched video, snapshot, and recorded video are sub-stream images. If you double-click one video for magnification, the watched video, snapshot, and recorded video are all main stream images and they are all in flow saving mode.

Note: If you select **Single Stream Mode**, enter **Setting** > **Local Setting** > **Storage Management** interface to set the stream mode of videos.

✧ **Export System Parameters**

Click the button to export system parameters to the local computer.

✧ **Capture Settings**

Image format: The formats of system captured pictures include JPEG and BMP. The default format is JPEG.

Image storage path: The default storage path of the captured pictures is **C:\Picture**.

✧ **Alert Settings**

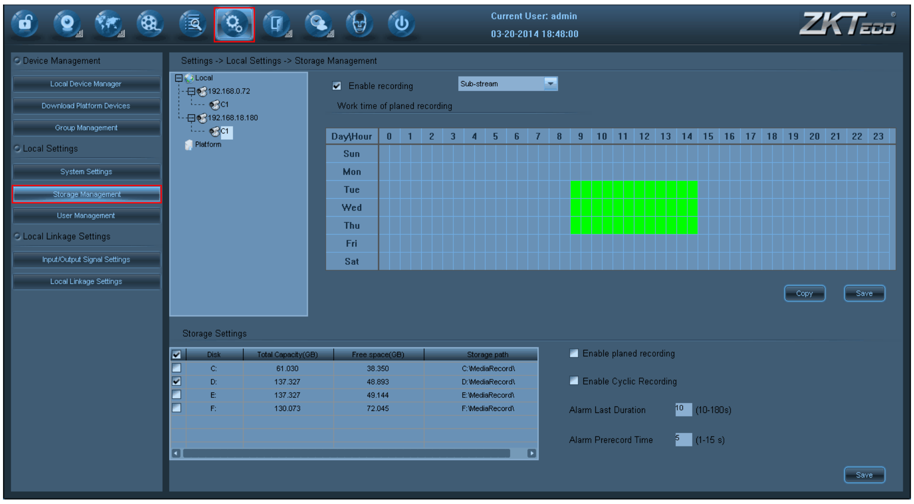
Disconnect Alert: Alert is generated when the device is disconnected.

Full HDD Alert: Alert is generated when the hard disk is full.

Failure Alert: Click **Test** to choose a sound for failure alerts.

Linkage Alert: Click **Test** to choose a sound for linkage alerts.

4.6.5 Storage Management



Double-click a camera channel in the device tree and complete the video recording configuration after successful connection.

✧ **Time management**

Enable recording: Set the stream format of recording, such as main-stream or sub-stream.

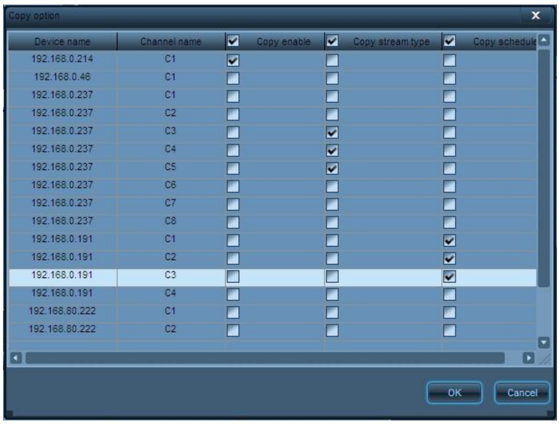
✧ **Work time of planned recording**

Sunday–Saturday: Indicates a week (unit: day).

0-23 Indicates one day (unit: half an hour).

Work time of planned recording: Click in the plan chart to drag a green area as shown above. The green area indicates the work time of planned recoding opened by the channel.

✧ **Copy**



Copy enable: If this option is selected, the video recording enabling status of the channel is copied.

Copy stream type: If this option is selected, the stream type of the channel is copied.

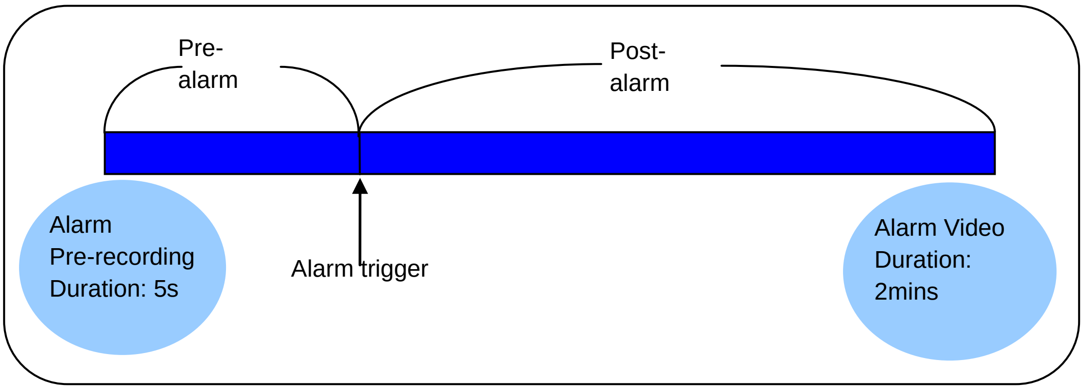
Copy schedule: If this option is selected, the planned video recording schedule of the channel is copied.

Enable planned recording: If this option is selected, the video recording planned in the schedule in green in the **Time management** area is enabled.

Video storage path: After Surveillance client software is installed; it will automatically detect the computer disk and displays the test results in the list. The default storage path is **D:\MediaRecord\.** When the space of the first selected disk is less than 5G, the second selected disk will begin to videotape.

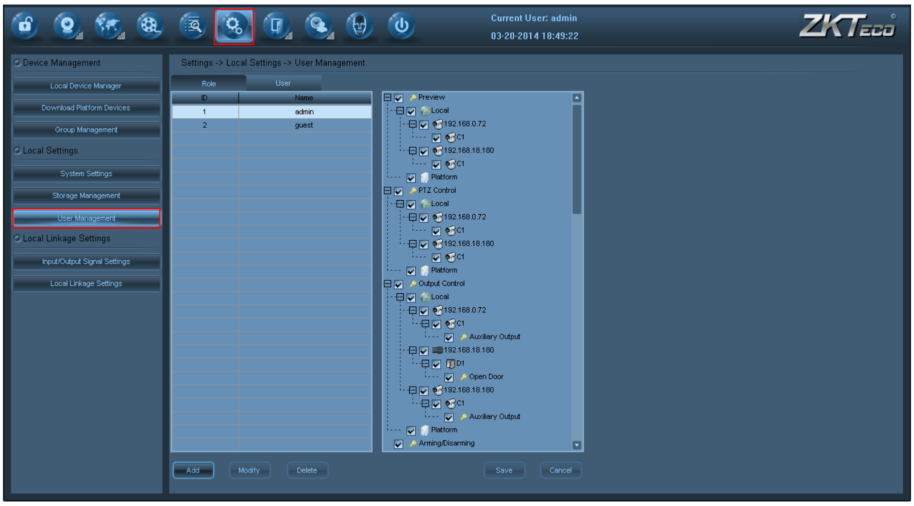
Alarm duration: The duration of the alarm videotaping is 5s by default. It can be set from 10s to 180s.

Alarm pre-recording duration: The pre-recording duration of the alarm videotaping is 5s by default. It can be set from 1s to 15s.



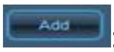
Video cyclic cover: If you select it, the system will automatically overwrite the earliest videotaping when all the configured videotaping disk spaces are less than 5G. If you clear it, the **Disk cleanup** interface will pop out when all the configured videotaping disk spaces are less than 5G. As long as one of the configured videotaping disk spaces is more than 5G, the scheduled videotaping will restart.

4.6.6 User Management

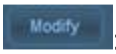


✧ **Role**

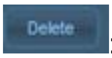
Role	Default Permission
admin	All permissions to perform all settings, which cannot be modified or deleted
guest	No permissions by default, which can be modified as required
custom	Role added by the user, which can be assigned by role



: Click the button to add a new role (only admin user or custom user with ***User Management*** permission can add a new role); assign permissions to the new role in the right permission list and click **Save**.



: Click a role in the role list and click the button to modify the role name.



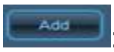
: Click a role in the user list and click the button to delete the role.

✧ **User**

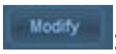
Name: is the name of user logging in the system.

Role: is the user role, whose permissions can be viewed in the right permission list.

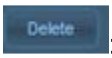
User State: Click ***Permit*** to allow the user to login the system; click ***Forbid*** to prohibit the user logging in the system.



: Click the button to add a new user.



: Click a user in the user list and click the button to modify the user information.

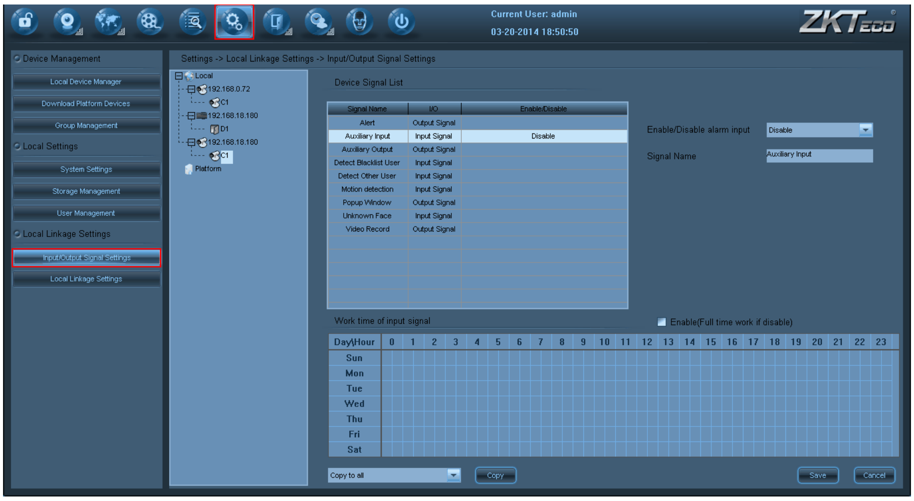


: Click a user in the user list and click the button to delete the user.

Notes: **(1)** The default super user of the system is ***admin*** and the default password is ***123456***. The super user cannot be deleted, and its user level cannot be modified. **(2)** A user level can only be modified by the

same user. **(3)** The system login password of an existing user can be modified in the ***Lock User/Log off User*** interface.

4.6.13 Input / Output Signal Settings



Double-click a camera channel in the device list. Set the input/output signal of the device upon successful connection.

Device Signal List: The system automatically lists all signals of the channel, and click to select a signal.

Enable/Disable alarm input: When there is an external alarm input device, select an auxiliary input signal in the Device Signal List. Select ***Enable*** to enable the external alarm input; click ***Disable*** to disable the external alarm input.

Signal Name: Select a signal in the Device Signal List to set the signal name.

Enable: Check the option to enable local alarm linkage during the preset period; uncheck the option to enable local alarm linkage all day long.

Sun ~ Sat: is a week period with the unit of day.

0 ~ 23: is a day with the unit of half an hour.

Work time of output signal: Click in the plan chart to drag a green area as shown above. The green area indicates the work time of signal alarm linkage.

Copy: If the work time of alarm linkage of Signal B is the same as that of Signal A, set the work time of Signal A and select Signal B in the dropdown list. Then, click  and . If the work time of alarm linkage of all signals is the same, set the work time of a signal and select **Copy to all**. Then, click  and .

4.6.8 Local Linkage Settings

Double-click a Camera Channel or Door of Access Device in the device tree. Modify or set the alarm linkage options of the channel upon successful connection.

Input Signal List: The system automatically lists all input signals of alarm linkage of the channel, and click to select a signal.

Linkage: Click to select an input signal. Click the button to set output actions for flexible and convenient linking: IP camera <--> IP camera, IP camera <-->Access device, Access device <-->Access device.

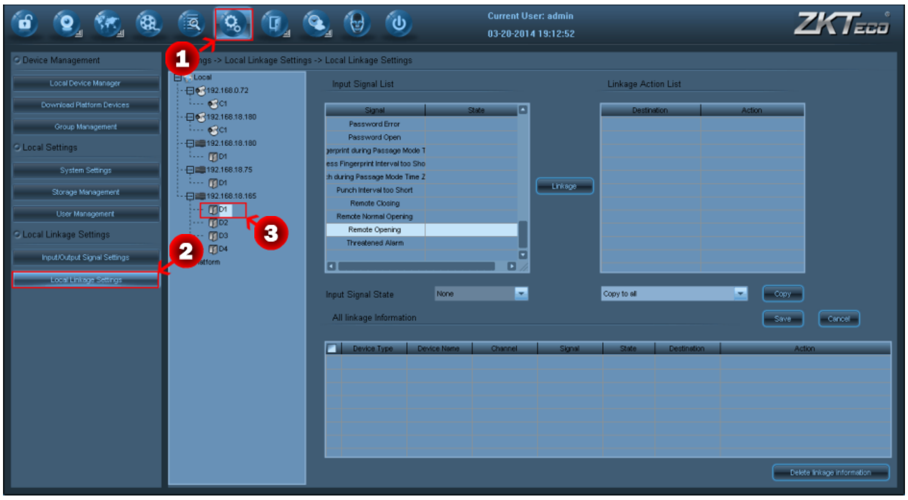
Linkage Action List: The system automatically lists the alarm linkage actions of the set linked input signal.

Input Signal State: includes **NO** and **NC** for auxiliary input signals. If the alarm input device is a normally open device, select **NO**; if the alarm input device is a normally close device, select **NC**. This setting option is not available for other input signals.

- **Set and Check Alarm Linkage** (taking setting linkage between the entrance guard device and the IPC camera as an example)

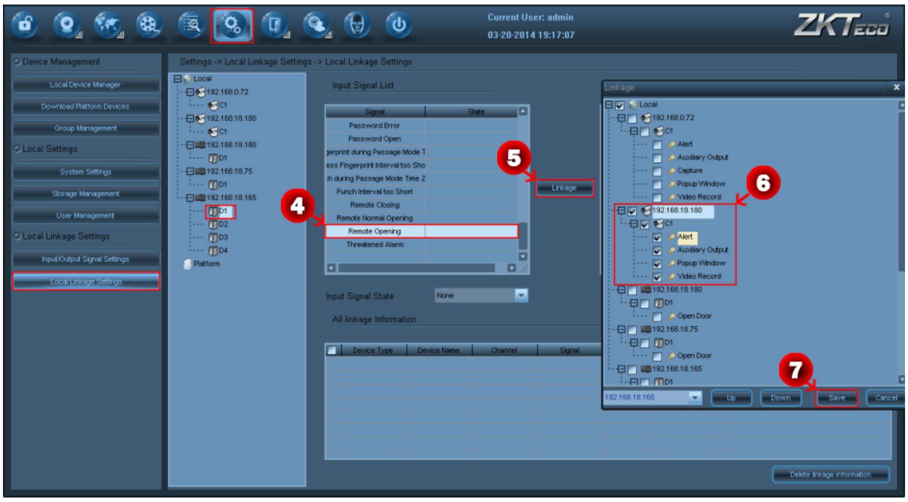
➢ **Add Alarm Linkage Information** (taking adding the alarm linkage of **Remote-Opening** as an example)

1. Double-click the door of the access device in the device list, and all the input signals of the door will be displayed in **Input Signal List** as shown in the following figure:



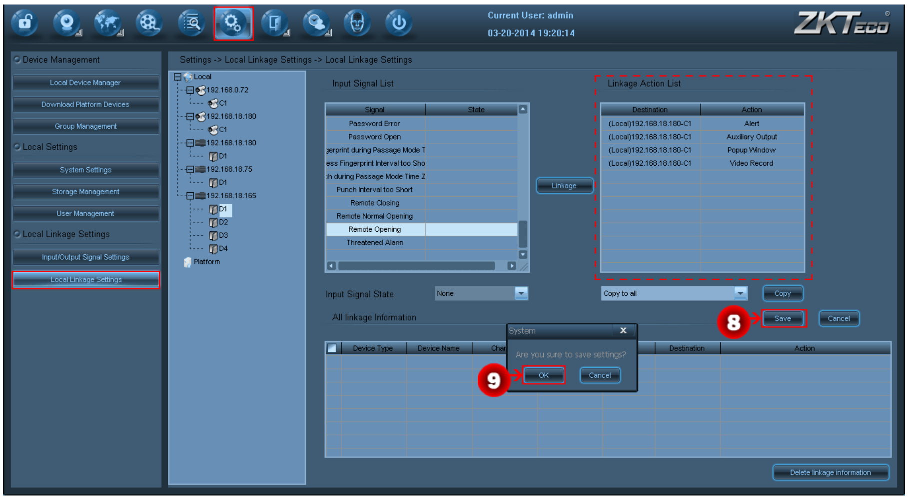
2. Click and select the input signal (single option) in the "Input Signal List", click the **[Linkage]** button, and the **Linkage (Output Signal)** window will be displayed.

3. Tick and select the output signals that require correlation (multiple options allowed) in the **Linkage** window, click the **[Save]** button to save and close the **Linkage** window as shown in the following figure:

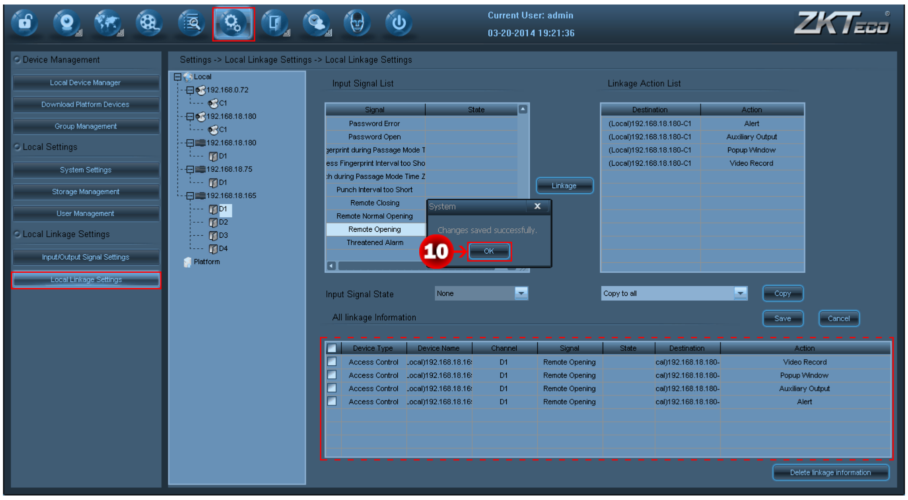


And then the **Linkage Output Signal** selected in **Step 2** will be displayed in **Linkage Action List**.

4. Click the **[Save]** button to save settings. The prompt "Are you sure to save settings?" will be displayed as shown in the following figure:



5. Click the **[OK]** button to save and close the prompt. And then the newly-added alarm linkage information will be displayed in **All Linkage Information** as shown in the following figure:



Copy Input Signal Alarm Linkage: If the linkage action and linkage time of Alarm B input signal are the same as those of Alarm A input signal, set the options of Alarm A input signal and select Alarm B input signal in the dropdown list. Then, click 

and 

. If the linkage action and linkage time of all input signals are the same, set the options of an input signal and select **Copy to all input terminals**. Then, click 

and 

. In this way, all input signals of the camera are set with alarm linkage.

All linkage information: The system automatically lists the linkage information of all devices, and click to select the information.

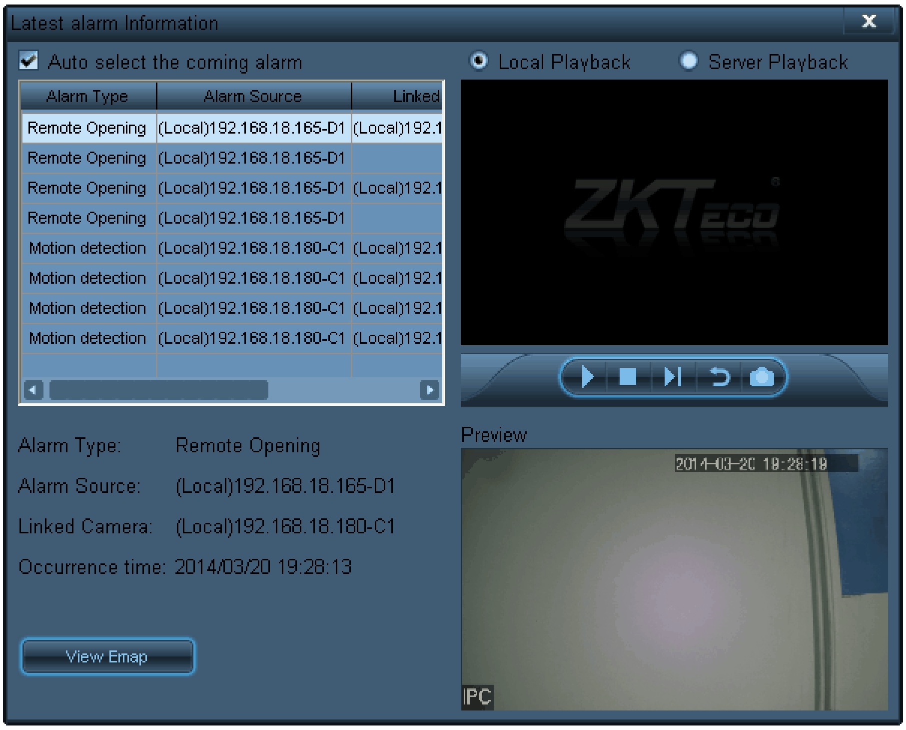
: Select a linkage action in the linkage information list and click the button to delete it.

➢ **Checking Alarm Linkage Information**

1. Click the **Preview** button  to enter the **Preview** window.

2. Right-click the door that has been added linkage settings and click **[Remote Opening of Door]** as shown in the following figure:

3. Then the system will give corresponding reminders. Perform operations according to the set alarm linkage as shown in the following figure:



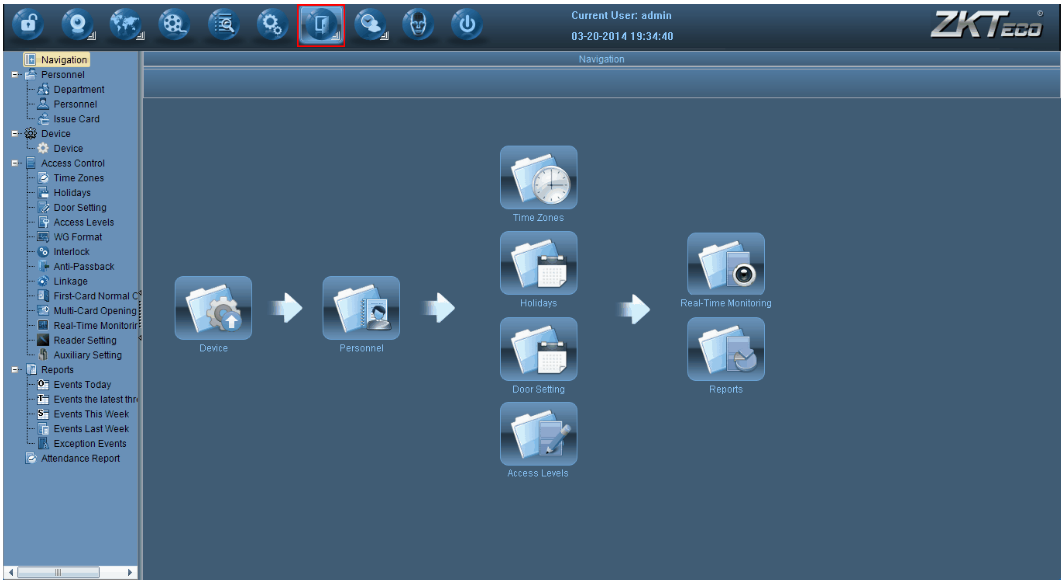
Local Playback: Check the alarm video files stored in this computer. For detail, please 4.4.1 Local Playback.

Server Playback: Check the alarm video files stored on the server. For detail, please 4.4.3 Server Playback.

View Emap: Click this button to enter the E-map interface. The operation method of E-map interface, please see 4.3 E-map.

Notes: **(1)** The alarm linkage of all signals can only work if the device (camera) surveillance is enabled in the preview interface. No linkage alarm is generated if the device surveillance is disabled. **(2)** If a new alarm message is generated within the alarm duration, the alarm duration is prolonged. **(3)** You must **Enable recording** to carry out the alarm linkage recording. For detail, please see 4.6.5 Storage Management.

4.7 Access Function



4.7.1 Personnel

To use the access control function of the system, enter the personnel system:

1. Set the company's organization structure in the department management settings.

2. Register personnel in the system and assign departments in the personnel management settings. Then, maintain and manage the personnel, and perform related access control settings.

4.7.1.1 Department

To manage the company's personnel, describe and manage the company's department organization structure. When you first use the system, the system has a default department with the name of **[Company Name]** and the number of Level **[1]**, which can be modified but not deleted.

The main functions of department management include Add Department and Maintain Department.

1. Add Department:

(1) Click **Personnel** > **Department** > **Add** to display the Add Department interface:

Description for each field:

Department Name: contains up to any 50 characters.

Department Number: shall not be the same as other department number, with a length of up to 50 digits.

Parent Department: Select a department in the tree controls as the parent department, or select a department in the dropdown list and click [**OK**].

(2) After all fields are completed, click [**OK**] to finish operation or click [**Cancel**] to cancel operation.

Alternatively, click [**Import**] to import the department information in other software or materials to the system. [Parent Department] is an important parameter to determine the company's organization structure. The company's organization structure chart is displayed in the form of department tree on the right side of the interface.

2. Maintain Department

The functions of department maintenance include Maintain Department and Cancel Department.

In case of any change in a department or the organization structure, click [**Edit**] to modify the Department Name, Department Number or the Parent Department. Click the Department Name directly or click the [**Edit**] button behind the department to enter the Edit interface.

To cancel a department, click the check box before the department and click [**Delete**], or directly click the ***Delete*** button behind the department.

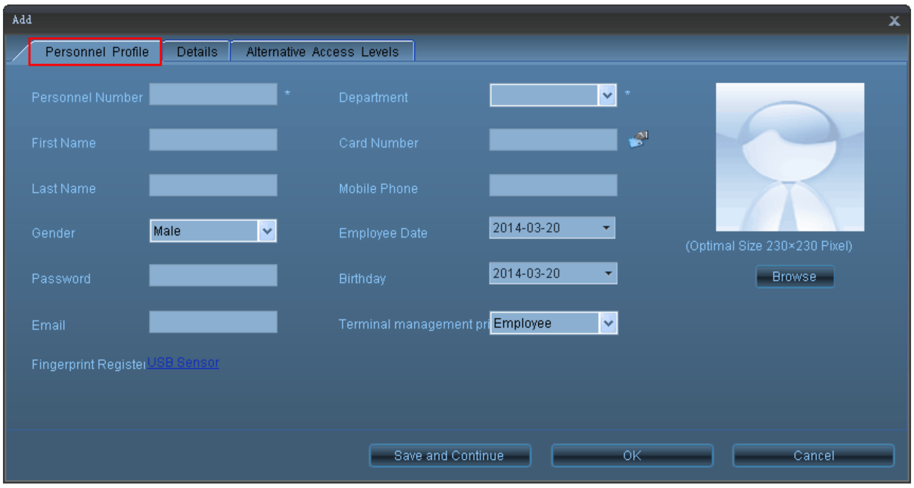
Note: Any department cannot be modified or deleted at will, or the department's personnel will lose their department. Besides, some history materials cannot be queried. If modification or deletion is required, transfer the department's personnel to another department.

4.7.1.2 Personnel

To use the management system, register personnel in the system, or import the personnel information in other software or materials to the system.

- **Add Personnel**

1. Click **Personnel** > **Personnel** > **Add** to display the Personnel Profile interface:



Description for each field:

Personnel Number: is up to 9 non-repeated digits by default.

Department: Click the dropdown box to double-click relevant department or select relevant department and click [**OK**].

ID Card Number: shall not be repeated and supports 15-digit or 18-digit ID card number.

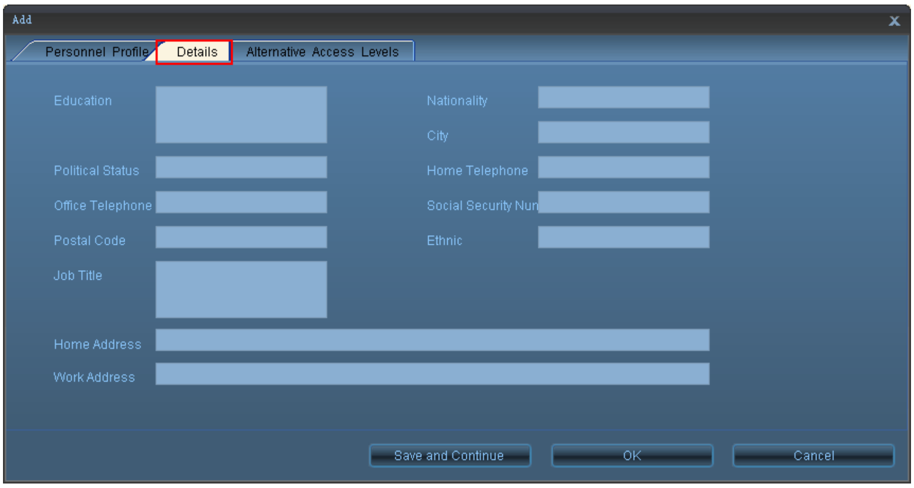
Card Number: is the assigned card number for access control verification. The card number can be inputted manually or assigned by the card reader.

Password: Set the personnel password. The access control panel only supports 8-digit password. To modify the password, clear the original password and input the new password.

Personal Photo: The optimal size is 120×140 pixel to save space resources.

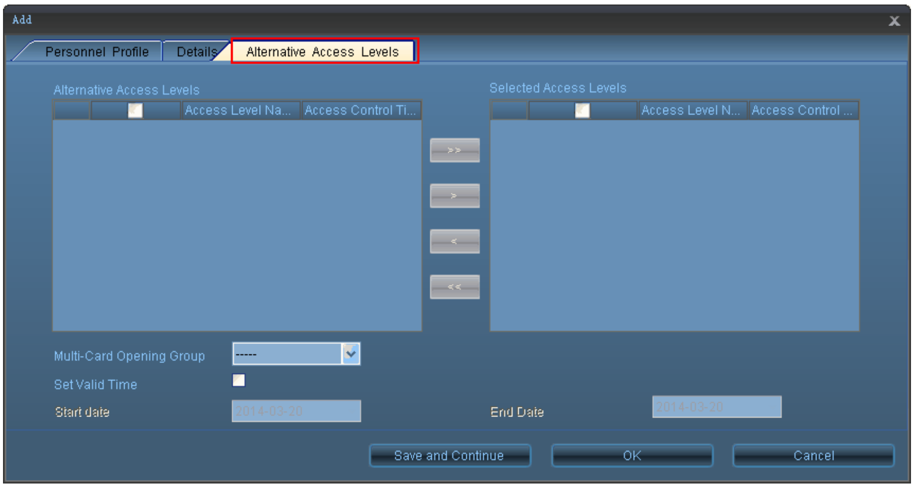
Employment Date & Birthday: Is the current date by default. Set according to needs.

✧ **Details**



Set the detail information according to needs.

✧ **Alternative Access Levels**



Access Control Settings: Select **Access Levels**, the start and close dates of **Set Active Time Zone**, **Multi-Card Opening Personnel Group**.

Set Active Time Zone: is available for temporary access control. Doors can only be opened within the active time zone. If the option is not checked, the access control is always active.

2. After editing the personnel profile, click [**OK**] to save and quit. The new personnel will be displayed in the personnel list.

4.7.1.3 Personnel Issue Card

The functions of Personnel Issue Card include Personnel Issue Card and Batch Issue Card.

To use these functions, directly click the personnel number in the personnel list to enter the Edit interface, or double-click [Edit]. After editing, click [**OK**] to save and exit.

1. Personnel Issue Card

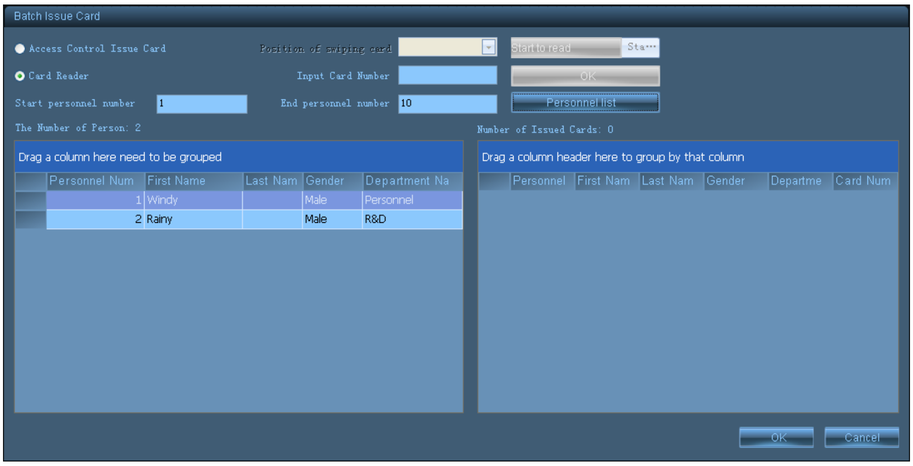
Assign the personnel with card number, including batch issue card and single person issue card.

(1) Instructions of Card Reader

The card reader is connected with PC through USB interface. Click the card number entry column and swipe the card on the card reader. Then, the card number is automatically displayed in the entry column.

(2) Operating Steps of Batch Issue Card

Click **Personnel** > **Personnel Issue Card** > **Batch Issue Card** to display the Batch Issue Card editing interface:



Personnel list: shows all personnel without cards within the personnel number range.

Input Card Number (or **Position of swiping card**): Click [**OK**] to assign card numbers to the personnel in the list from the top down, until all personnel are assigned with card numbers.

Click ***OK*** to finish card issue and return. The personnel and their card numbers are displayed in the list.

(3) Operating Steps of Single Person Issue Card

Click **Personnel** > **Personnel Issue Card** and select **Add** or select a person in the Single Person Issue Card interface and double-click ***Add***, to pop up the following dialog box:

Select a person and input the card number. Then, click [**OK**] to finish.

Note: The system supports card issue by card reader and manual entry of card number.

2. Personnel Adjustment

Personnel adjustment refers to daily maintenance of existing personnel, mainly including adjusting department and deleting personnel.

(1) Adjust Department

Click **Personnel** > **Personnel**. Select personnel and click **Adjust Department** to display the editing interface.

Select the adjusted department.

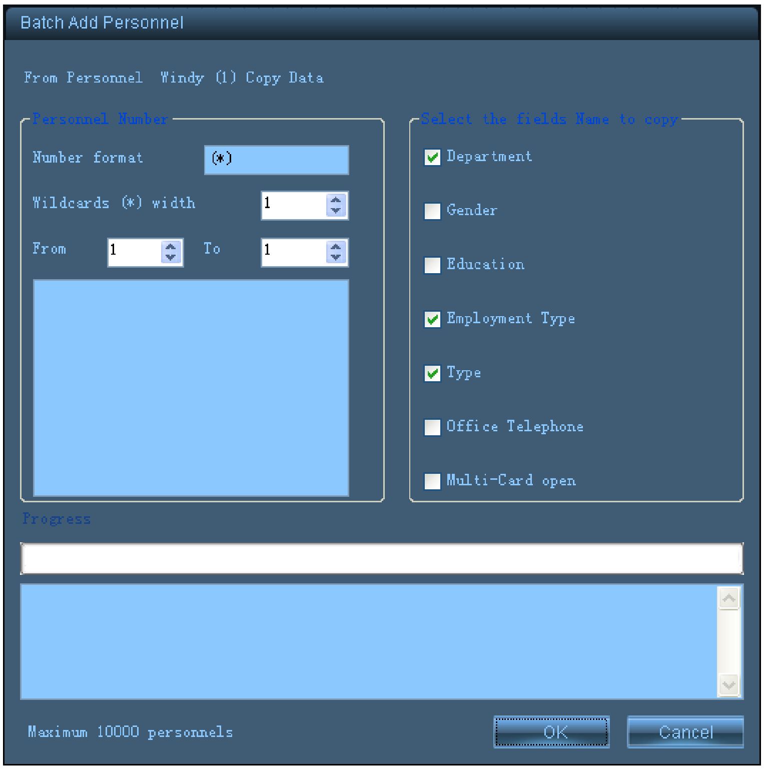
After editing, click [**OK**] to save and exit.

(2) Delete Personnel

Click **Personnel** > **Personnel**. Select personnel and click [**Delete**], or double-click to select [**Delete**] and click [**OK**] to delete the person.

Note: The database of the person is deleted at the same time when the person is deleted.

(3) Batch Add Personnel



To batch add personnel, select the personnel to be copied. The Batch Add Personnel function is not available without personnel information. The length of number of personnel to be batch added shall not exceed 8 digits. A maximum of 10000 people are allowed to be added in a batch.

Number format: is the personnel number format and "(*)" refers to wildcards.

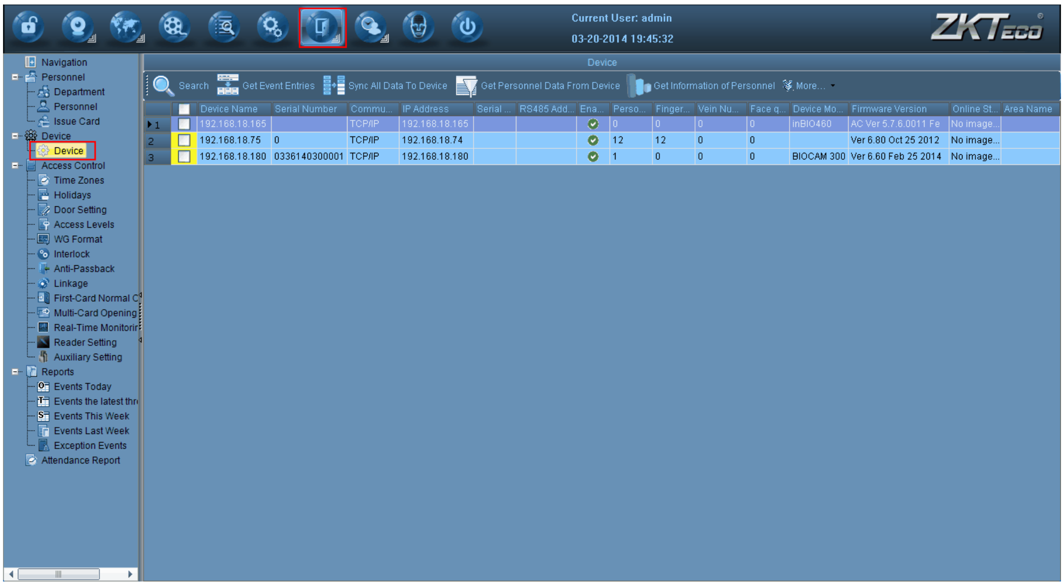
Wildcards (*) width: is the valid width of wildcards, and limits the number of digits in ***From*** and ***To*** edit boxes.

Select the fields name to copy: Select the same information of batch added personnel as that of the personnel to be copied.

4.7.2 Device

The system needs to be connected with the access and attendance device to realize the **Access** and **Attendance** function. To use the function, first install the device and connect it with network. Then, set relevant parameters in the system to manage the device, upload user access control data, download configuration information, enter various reports and realize digital management of a company.

Set communications parameters of the connection equipment. Correct communications parameters ensure normal communications with the device, including system settings and device settings. Upon successful communications, the information of the connected device can be viewed, and remote surveillance, uploading and downloading can be performed.

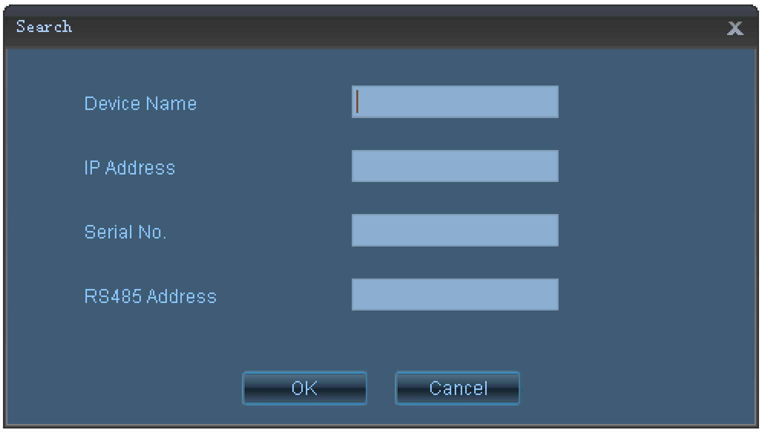


- **Device Maintenance**

To realize communications, data uploading and configuration information downloading between the system and the device, set parameters of the device and the system. The user can view access control panels with all permission in the system. To add or delete the device, go to the Device Management interface.

4.7.2.1 Search Device

Search: Click **Device** > **Device** > **Search** to pop up the following interface. Enter the device name to search.



4.7.2.2 Get events entries

Get events entries: Get event records of the device to the system. Three options are available: Get new records, Get all records, and Get records through SD card.

Get new records: The system only gets new event records generated after last got records and record them into the database. Repeated records are not written in.

Get all records: The system gets all event records in the current panel again. Repeated records are not written in.

Clear record after downloaded: The system will record all the events of the current device and download them to the software. And then all the records in this device will be deleted.

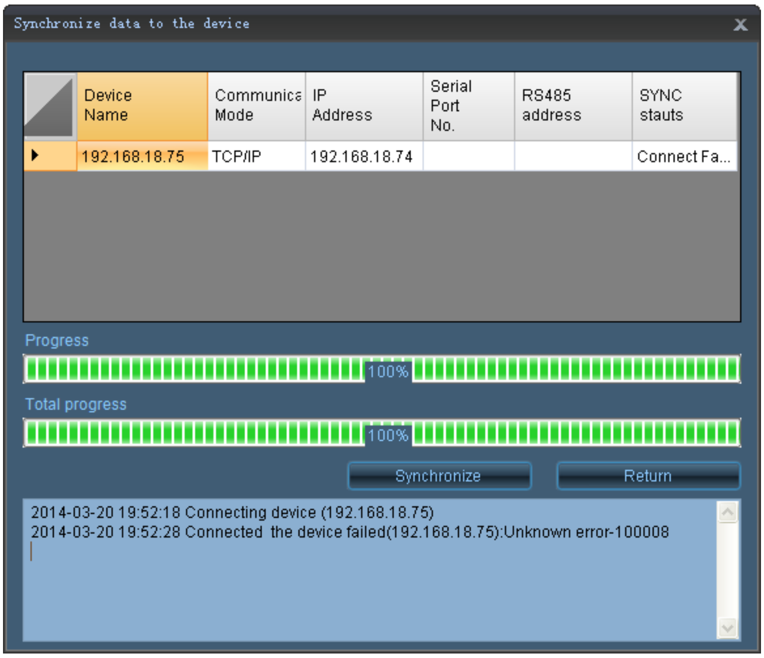
Get Entries From SD Card: The system reads data in the SD card and gets panel event records. Then, the software saves SD card backup records to the system after analysis.

In the event that the event records in the device are not uploaded to the system in real time as a result of network interruption or communications interruption due to other factors, manually get event records in the device by reading SD card. Alternatively, you can set timed getting.

Note: (1) A maximum of 100,000 event records are stored in the access control panel. (2) After ticking **Time Attendance** in **Door settings**, the software will analyze the acquired event records and sort out the attendance status of different events automatically according to the shift arrangement of the system. In this way, users can add up and check the attendance report information easily. The detail operation of Door Settings, please see 4.7.3.3 Door Setting.

4.7.2.3 Synchronize data to the device

Synchronize data to the device: Synchronize new data to the device, such as new personnel and new access control settings. This is called increment synchronization.

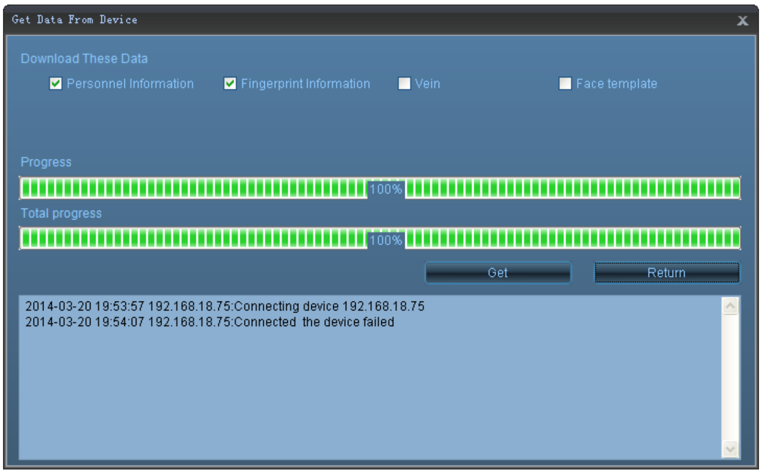


See the device adding operation for the definitions of the preceding parameters and related settings. The items in grey are not editable. The device name cannot be same as other device name.

The device type of the access control panel shall not be modified. In case of wrong type, delete the device manually and add a device again.

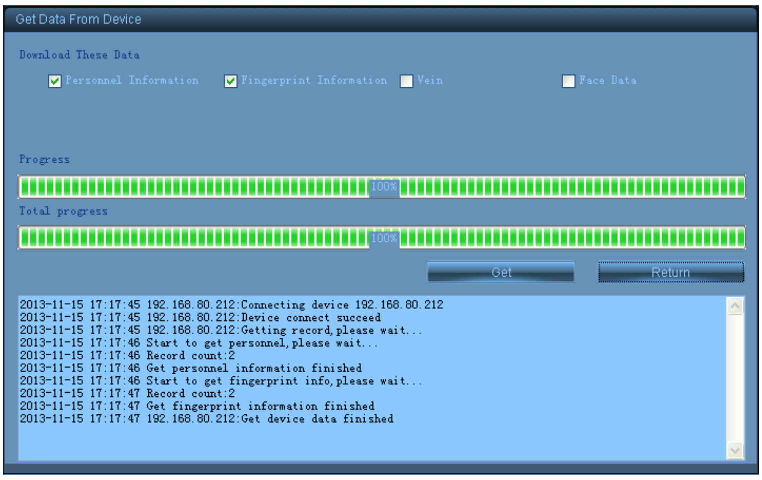
4.7.2.4 Get Data From Device

Download the data (including **Personnel Information**, **Fingerprint Information**, finger **Vein** and **Face Template**) in the device to this software:



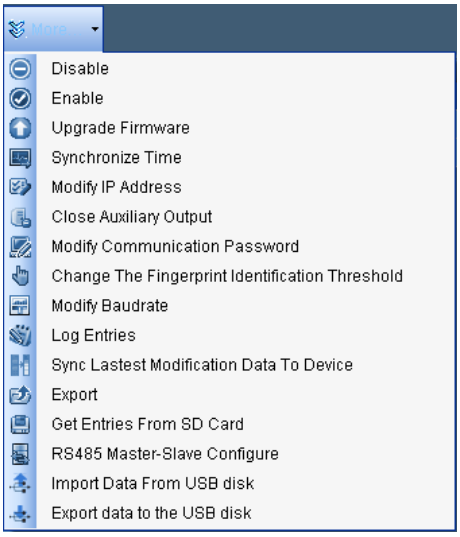
4.7.2.5 Get Personnel data from device

Get Personnel data from device: Save source information from the device to the software, as shown in the figure:

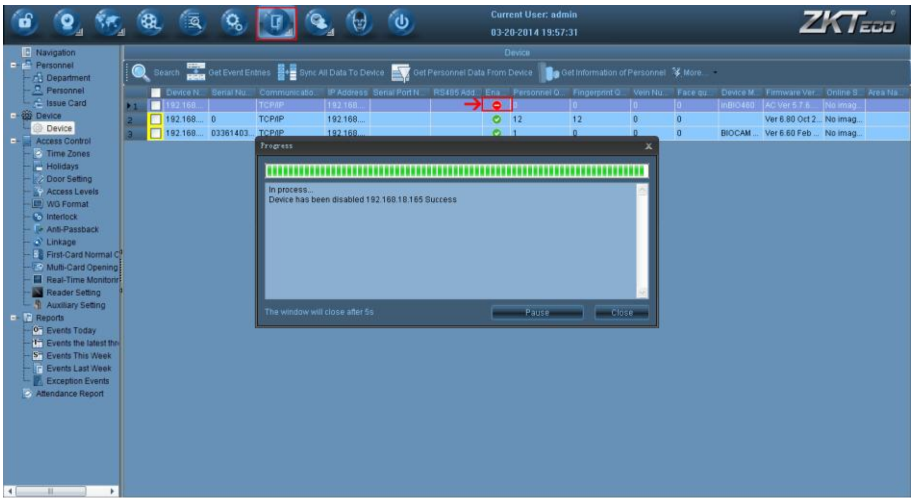


4.7.2.6 More Operations

More: includes Modify IP address, Disable auxiliary output, Disable, Enable, Modify Communication password, Synchronize time, Get event records, Upgrade firmware, and Log.



(1) Disable/Enable: Select the device and click ***Disable/Enable*** to stop/start using the device. When the communications between the device and the system are interrupted or the device fails, the Disable state is automatically active for the device. In this case, after adjusting the network or the device, click [Enable] and the system is connected with the device again to resume communications of the device.



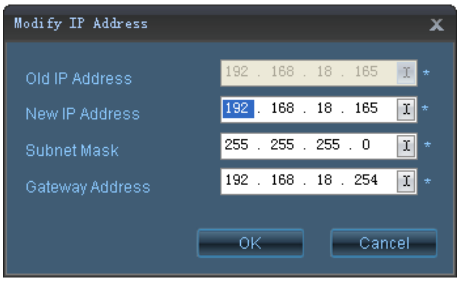
Note: If the current device is at the enable state and not connected, enable the device and the system is connected with the device again immediately.

(2) Upgrade firmware: To upgrade the firmware in the device, select the device and click ***Upgrade firmware*** to enter the editing interface. Click [**Browse**] and select the firmware upgrade file (emfw.cfg). Click [**OK**] to start upgrading.

Note: The user shall not upgrade firmware at will. Before upgrading firmware, contact the dealer or upgrade firmware upon receipt of the dealer's notice. Any problem resulted from arbitrary upgrade may affect usage of the device.

(3) Synchronize time: Synchronize the device time with the current server time.

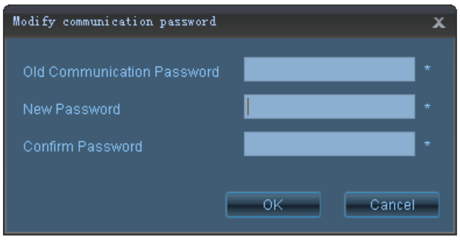
(4) Modify IP address: Select the device and click ***Modify IP address*** to display the editing interface. The Gateway Address and Subnet Mask are obtained from the device in real time. In case of failure in obtaining them, the network is not connected and the IP address cannot be modified. Enter new IP address, gateway address and subnet mask. Click [**OK**] to save settings and exit. The function is basically the same as Modify IP address in 4.6.1 Local Device Manager. The difference is that in the latter case, the device is not added in the system, while in the former case, the device is added in the system.



Note: Reboot the device to make the modification effective. IP address of Access device will sync with that of IP camera automatically, while reboot the BIOCAM Series Device. Therefore only via modify the IP address of IP camera can make the IP address of Access device changed.

(5) Disable auxiliary output: Disable external devices connected with the device auxiliary output interface. Only one device is selected a time for this operation.

(6) Modify Communication password: To modify the communication password, enter old communication password and pass verification. Then, enter a new password twice and click [**OK**].

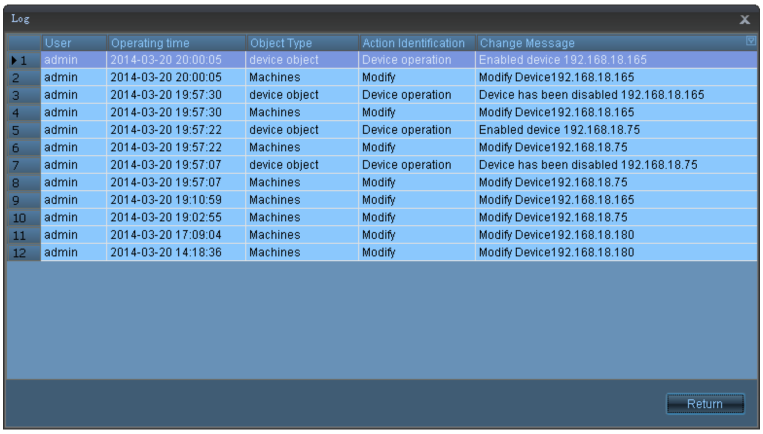


Note: The communication password shall not contain spaces, and combination of numbers and letters is recommended. To set the communication password can improve the device security, and is recommended for each device.

(7) Modify fingerprint match threshold: The user can modify the fingerprint match threshold in the device. The threshold ranges 35 ~ 70 and is 55 by factory default. When a device is added, the system

reads the threshold of the device. Upon successful reading, the user can view the current fingerprint match threshold in the device list. Fingerprint match thresholds of several devices can be batch modified.

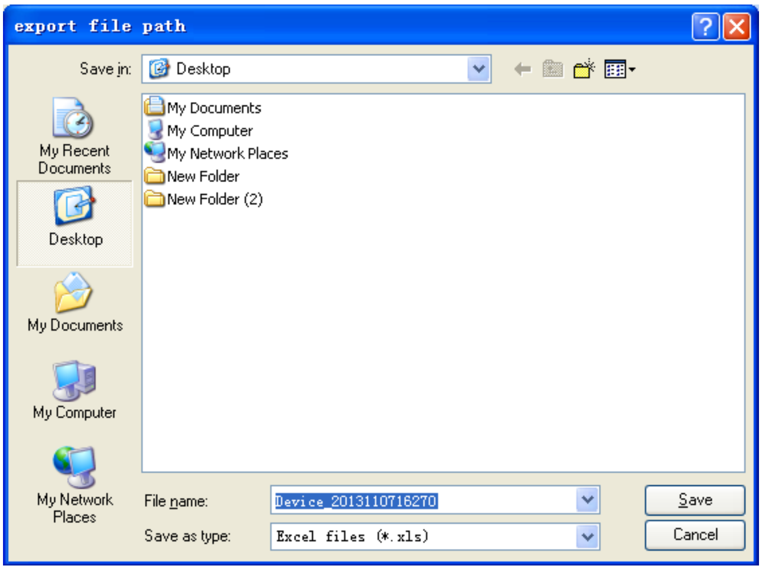
(8) Log: records and lists all history operations of the software. There are Log buttons in the Personnel, Department and Personnel Issue Card interfaces. Click the Log button to display relevant records.



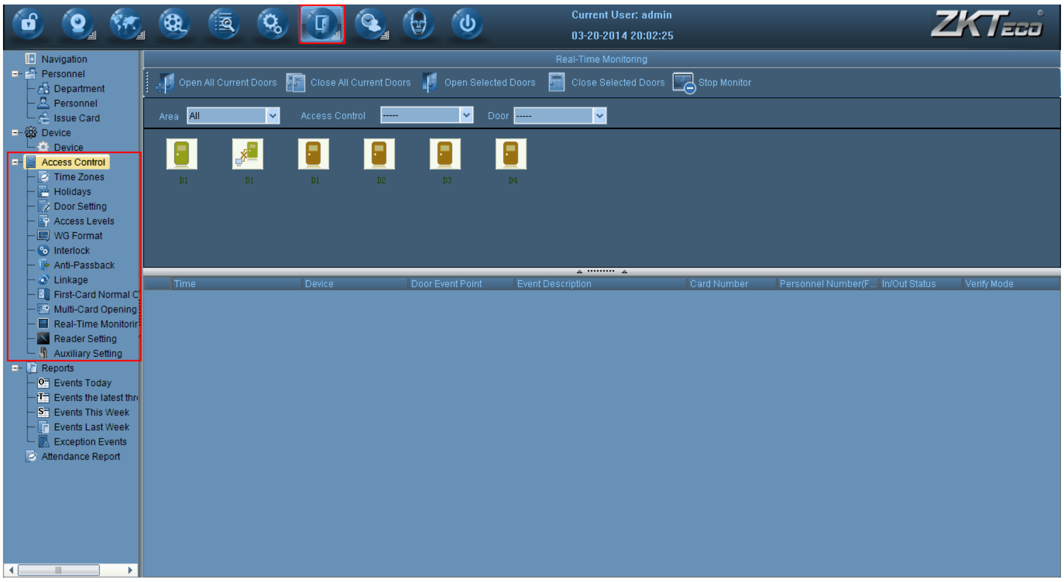
(9) Synchronize data to the device: Synchronize system data to the device, including door data, access levels (personnel and time zone), anti-pass back, interlock, linkage, first-card opening and multi-card opening. Select the device and click ***Synchronize data to the device*** to synchronize data.

Notice: Before all data is synchronized to the device, all existing data (excluding event records) in the device is deleted and all settings data is synchronized again. You should ensure smooth network connection and avoid outage. In addition, when the device works normally, be careful to perform the operation. You can synchronize data to the device during a period when few people use the device, to not affect normal use.

(10) Export: Click **Device** > **Device** > **Export** to pop up the following interface. Click ***Save*** to export the device data to your computer in EXCEL, PDF or txt. format.



4.7.3 Access Control



1. System Working Principle

The access control system is a management system based on the C/S architecture, and can consistently manage personnel access by controlling network access control panels with computer.

The access control system can set access levels of registered users who are allowed to access some doors within a certain time period.

The system supports several databases (such as Access and SQL Server) and multiple languages. It is designed based on multi-business integration and supports business expansion such as attendance check.

2. System Parameters Description

- 256 time zones
- 256 access levels
- Three types of 96 holidays
- Anti-pass back
- Interlock
- Linkage
- First-card normal open
- Multi-card opening
- Remote opening and closing
- Real-time monitoring

3. Introduction to Operating Functions of Access Control System

Click to enter the **Door Control** system and **Real-Time Monitoring** is displayed on the homepage.

The access control system management mainly includes: time zones, holidays, door setting, access levels and real-time monitoring.

Note: See the T**erminology** for definitions of parameters of the Section.

4.7.3.1 Time Zones

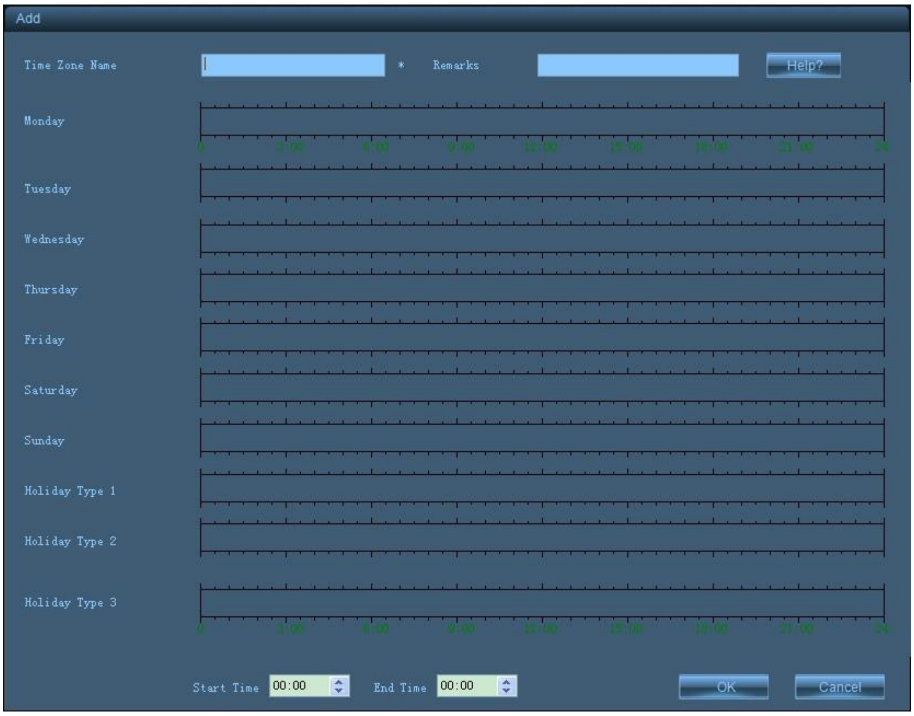
Time zones can be used to set access time. Enable read heads within valid time zones of specified doors and disable read heads within other time zones, or set normally open time zones of doors. Time zones can also be used to set access levels. Specified users can access specified doors within preset time zones (including access levels and first-card normal open settings).

The system controls the access as per preset time zones. The system can define a maximum of 255 time zones. Each time zone can be defined in a week, and each day of three holiday types can have a maximum of three time intervals in valid time within 24 hours. The format of each time interval of time zone is HH:MM - HH:MM as per 24-hour system and accurate to minute.

A default time zone named **24-hour Pass** is in the initial system, which can be modified but not deleted. The user can add new time zones which can be modified or deleted.

1. Add Time Zone

(1) Click **Access Control** > **Time Zones** > **Add** to set possible time zones in the time zone settings interface.



Description for each parameter:

Time Zone Name: contains up to any 50 characters.

Remarks: contain a maximum of 70 characters, and describe details of the current time zone, including explanations and main application occasions, which facilitate the user or others with the same access level to view the time zone information.

Time Interval and **Start Time and End Time**: A time zone includes three time intervals a day within a week, and three time intervals each of three holidays. Set the start time and end time of each time interval.

Setting Method: If the time zone is normal open, enter 00:00 ~ 23:59 in the time interval, or click to drag the whole time frame; if the time zone is empty by default, it is normal close. Three time intervals are set for a time zone, so use the mouse to drag only three time zones in each time frame.

Holiday Type: Three holiday types in the time zone are irrelevant with any day of a week. If a time zone coincides with a holiday type, the three time intervals of the holiday type shall prevail. The holiday type in the time zone is optional. If the user leaves the holiday type empty, the system gets the default value.

After setting the time zone, click [**OK**] and save. The time zone is displayed in the list.

2. Maintenance of Time Zone

Edit Time Zone: In the time zone list, double-click a time zone or select a time zone and click [**Edit**] in the menu, to modify the time zone in the time zone editing interface. Click [**OK**] to save the modified time zone which is displayed in the time zone list.

Delete Time Zone: In the time zone list, select a time zone and click [**Delete**]. Click [**Yes**] to delete the time zone; click [**No**] to cancel. The time zone in use cannot be deleted.

Click the check box before one or several time zones in the time zone list. Click [**Delete**] at the top of the list. Click [**Yes**] to delete the selected time zones; click [**No**] to cancel.

4.7.3.2 Holidays

The access control time of holidays may not be the same as normal. The system supports holiday access control time settings to facilitate operation.

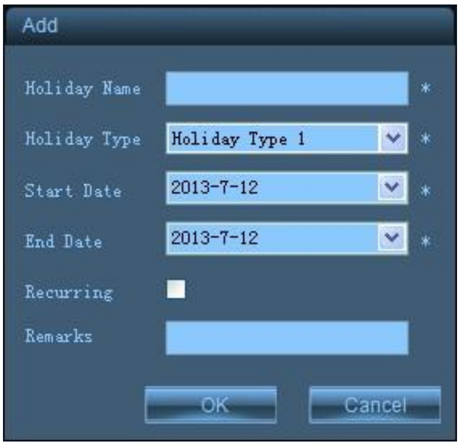
The holiday management includes Add Holiday, Modify Holiday, and Delete Holiday.

1. Add Holiday

Holidays support three types. Each type contains up to 32 holidays. To set special access levels on some particular dates, use the Holidays function.

Operating steps:

(1) Click **Access Control** > **Holidays** > **Add** to enter the Add Holiday editing interface:



Description for each field:

Holiday Name: contains up to any 50 characters.

Holiday Type: includes Holiday Type 1, Holiday Type 2 and Holiday Type 3. A newly added holiday record must be any of the three types. Each type contains up to 32 holidays.

Start Date and End Date: The start date shall not be later than the end date, or the system prompts error. The year of the start date shall not be smaller than the current year, and the holiday dates shall be within a year.

Recurring: includes Yes and No. The default is **No**. For holidays not to be modified for the next year, such as the New Year's Day dated January 1 of each year, select ***Yes***. For the Mother's Day dated the second Sunday in each May, select ***No*** as the date is uncertain.

For example, if the date of **New Year's Day** is set at January 1, 2012 and to be Holiday Type 1, January 1 is not subject to access control by **Friday**, but subject to access control by **Holiday Type 1**.

(2) Click [**OK**] to save and display the added holiday in the holiday list.

2. Modify Holiday

To modify the existing holiday, select the holiday and click [**Edit**] or double-click the holiday to enter the editing interface. Click [**OK**] to save and quit.

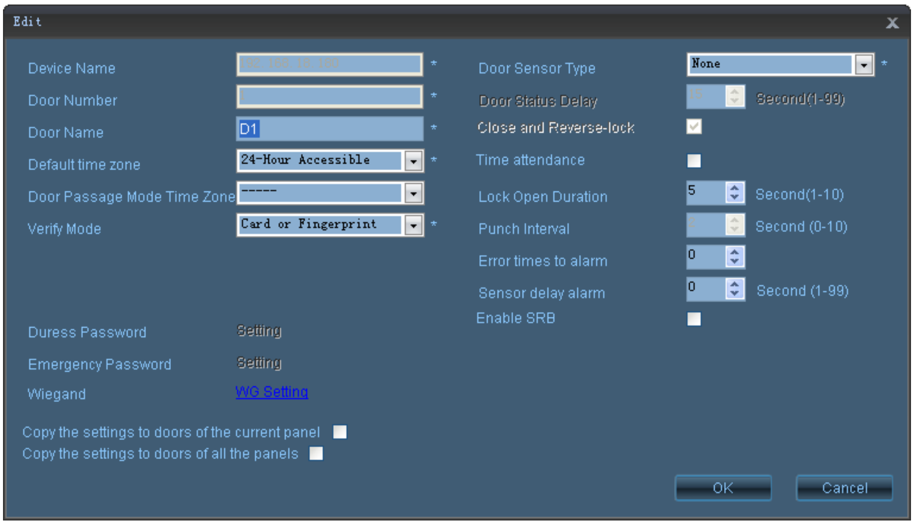
3. Delete Holiday

In the holiday list, select a holiday and click [**Delete**]. Select [**Yes**] to delete the holiday; click [**No**] to cancel. The holiday in use cannot be deleted.

4.7.3.3 Door Setting

Operation steps for modifying 4FEE door parameters:

Enter the **Access Control** > **Door Setting** interface to select the door whose parameters need to be modified, click the [**Edit**] button in the menu, or double-click the door to be modified. The edit interface is displayed;



Description for each field:

Device Name: is a non-editable item.

Door Number: The system automatically numbers the doors based on the number of doors of the device (for example, the number of each door in a four-door panel is respectively 1, 2, 3, and 4). Each door number in the system is consistent with that of the device.

Note: By default, the number following the underline in the door name is consistent with the door number. But the 1/2/3/4 in Anti-Pass back and Interlock refers to the door number, not the number in the door name. No positive connection between the two, and the system allows the user to modify the door name, so the two cannot be mixed up.

Door Name: is **D_door number** by default, allowing the user to modify the door name as required, and at most 50 any characters allowed to fill in this field.

Door Active Time Zone and **Door Passage Mode Time Zone:** By default the two fields are null. The lock open duration after the initialization and that added by the user are displayed here for the user to select. In door editing, Door Active Time Zone is a required item. A door can be normally open and closed only if its door active time zone is set up. The door passage mode time zone is effective only if it is included within the door active time zone. It is recommended to include the door passage mode time zone within the door active time zone.

Note: Swipe the card with access permission to a door for 5 times in succession, the intraday passage mode of the door can be disabled (including the first-card normal open), and the door is closed immediately.

Punch Interval: is measured by **second** (ranges from 0–10s), **2s** by default.

Door Sensor Type: includes **None**, **Normal Open**, and **Normal Closed**. By default this field is **None**. In door editing, the user can select **Normal Open** or **Normal Closed**. If **Normal Open** or **Normal Closed** is selected, Door Status Delay and Close and Reverse-lock need to be selected. By default, once the Door Sensor Type is set to **Normal Open** or **Normal Closed**, the **Door Status Delay** is ***15s*** by default, and the Close and Reverse-lock is enabled by default.

Close and Reverse-lock: reverse-locks a door after it is closed. Select this item to reverse-lock a door;

Verify Mode: supports Card Only, Card and Password, Password Only, Card and Fingerprint, and Card or Fingerprint. By default this field is Card or Fingerprint. If Card and Password is selected, please ensure that the door uses a read head with keyboard.

Duress Password and Emergency Password: Use **Duress Password** to open a door under duress (use it cooperatively with a registered card), and the duress password gives an alarm when opening the door. Use **Emergency Password** (also called **super password**) to open a door under an emergency. The emergency password opens a door normally, and is effective in any time zone and in any verify mode, usually used by administrator.

In using **Duress Password** to open a door (using it cooperatively with a registered card), if the verify mode is **Card Only**, press [**ESC**] first, then input the set password and click [**OK**], and swipe the registered card. The door is opened and an alarm is generated. If the verify mode is **Card and Password**, swipe the registered card first, then input the set password and click [**OK**] (the same with opening a door normally under the mode of Card and Password). The door is opened and an alarm is generated.

In using **Emergency Password** to open a door, the password must be numbers (whole number) that are less than or equal to 8 digits. Input the password to open the door. Each time press [**ESC**] first, then input the password and click [**OK**] to open a door by emergency password.

When the duress password or emergency password is used, the time interval to input each number cannot be longer than 10s. It is recommended that the two passwords be different.

Time Attendance: Select this item to make the punch card record of a door used for attendance checking.

Time Attendanc: After ticking and selecting **Time Attendanc**, the system will record the door-opening and door-closing events as attendance and sort out attendance status automatically according to the shift arrangement of this software. In this way, users can add up and check attendance reports easily. For more details about the operation method of **Obtain Event Records**, see 4.7.2.2 Get events entries**.**

Note: To perform attendance checking, at least one door must be selected in **Door Setting**. If no door is selected, no record will be displayed in the attendance checking software report module.

Copy the settings to doors of the current panel: Select this item to apply the settings to all doors of the current panel;

Copy the settings to doors of all the panels: Select this item to apply the settings to all doors of all the panels within the scope of the current user's permissions;

After editing the parameters, click [**OK**] to save and exit.

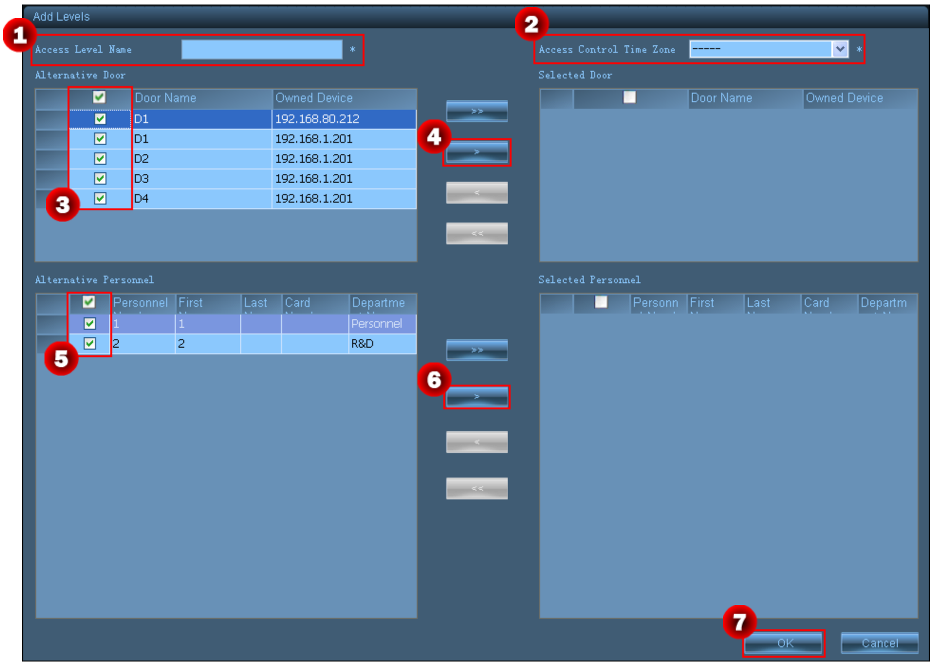
See the **Terminology** in the first page of this user manual for other parameter description.

4.7.3.4 Access Levels

Access levels refer to one selected door or several selected doors that can be opened by verification within certain time zones.

Add Levels:

1. Click **Access Control** > **Access Levels** > **Add Levels** to enter the Add Levels editing interface;



2. Set each parameter: the Access Level Name (unrepeatable), Access Control Time Zone, Selected Door, and Selected Personnel;

3. Click [**OK**] to finish the settings and exit. The added access level is displayed in the list.

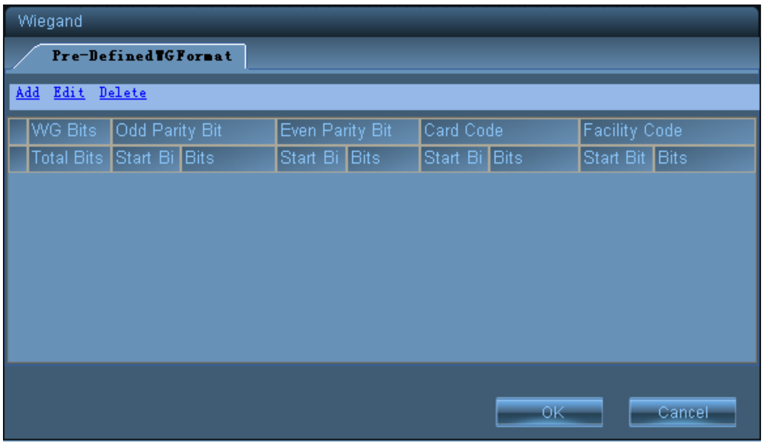
Note: **(1)** Different doors of different panels can be selected and added to an access level. **(2)** In adding personnel, if the selected personnel are included in the current access level, the system will not re-add them. **(3)** The system does not allow two access levels with the same time zone and selected doors.

Personnel Access Permission Settings: Select the target personnel in the right column, click **<<** to remove the personnel from this access level.

4.7.3.5 Wiegand Setting

Take the following steps to customize the Wiegand format table based on requirements.

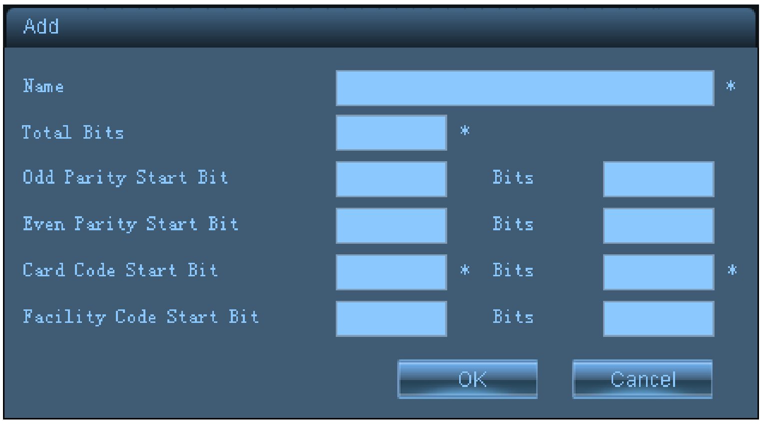
Click **Access control** -> **Wiegand**. The **Pre-DefinedWGFormat** window is displayed.



You can add, edit, or delete Wiegand formats.

- **Adding Wiegand formats**

1. Click **Add** in the **Pre-DefinedWGFormat** window. The **Add** window is displayed.



The fields are described as follows (the fields with "*" must be set):

Name: name of a user-defined Wiegand format

Total Bits: total length of the user-defined Wiegand format (range: 1–80)

Odd Parity Start Bit and **Bits**: start bit and length of odd parity (the value of **Bits** cannot be greater than that of **Total Bits**)

Even Parity Start Bit and **Bits**: start bit and length of even parity (the value of **Bits** cannot be greater than that of **Total Bits**)

Card Code Start Bit and **Bits**: start bit and length of the card code (the value of **Bits** cannot be greater than that of **Total Bits**)

Facility Code Start Bit and **Bits**: start bit and length of the facility code (the value of **Bits** cannot be greater than that of **Total Bits**)

2. Click [**OK**] when you finish setting the preceding fields.

- **Editing and deleting Wiegand formats**

Select a Wiegand format in the Wiegand format list and click **Edit** or **Delete**. The **Edit** or **Delete** window is displayed. Edit or delete the selected Wiegand format based on instructions in the window.

4.7.3.6 Interlock

Interlock can be implemented among two (multiple) doors of a panel. When one door is open, the other doors are closed. When a door needs to be opened, other corresponding doors must be closed; otherwise the door cannot be opened.

Before the interlock, please ensure that the door sensors are connected according to the panel *Installation Guide*, and set the door sensor type to **Normal Open** or **Normal Closed** in **Door Setting**.

Operation steps for adding interlock:

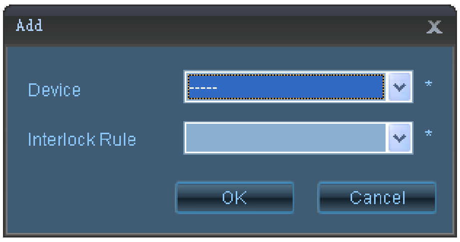
1. Click **Access Control** > **Interlock** > **Add** to enter the interlock Add edit interface.

2. Select a device to display its interlock rule. Because one device corresponds to only one interlock rule, the devices that are already interlocked cannot be viewed in the drop-down list of Device during adding interlock. Delete the set interlock, and the corresponding device will return to the drop-down list of Device. The settings interface is different based on the number of doors of the selected device:

(1) One-door panel cannot implement interlock.

(2) Two-door panel can implement 1-2 two-door interlock.

(3) Four-door panel can implement 1-2 two-door interlock, 3 - 4 two-door interlock, 1-2-3 three-door interlock, and 1-2-3-4 four-door interlock.



3. Select one item in the drop-down list of Interlock Rule (the interlock rules with different doors can be multi-selected). Click ***OK*** to finish the settings. The added interlock is displayed in the list.

For example, if 1-2-3-4 four-door interlock is selected, Door 3 can be opened only if Doors 1, 2, and 4 are closed.

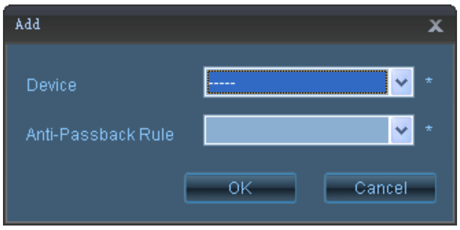
Note: In the editing, only the interlock rule can be modified, and the device cannot be changed. If a device needs to disable its interlock function, delete its corresponding interlock rule. In deleting a device record, its interlock record will be deleted together.

4.7.3.7 Anti-Passback

Anti-Passback supports entrance and exit anti-passback. In some special circumstances, the personnel using an access card have to exit through the same door where they swipe the card to come in. The card swiping record must be strict corresponding in pairs of entrance and exit. If you come in by following someone without swiping the card, you cannot go out by swiping the card. Similarly, if you go out by following someone without swiping the card, you cannot come in by swiping the card. Or if you give the card to someone else after you swipe the card and come in, he/she cannot come in with your card. If you swipe the card but do not come in, you cannot come in by swiping the card a second time. The same rule applies to going out. The user can enable this function in settings. This function usually applies to prisons, armed forces, national defense, and scientific research sites, and vaults in banks and so on.

Operation steps for adding anti-passback:

1. Click **Access Control** > **Anti-Passback** > **Add** to enter the anti-passback Add edit interface.



2. Select the target device (N-door panel). Because one device corresponds to only one anti-passback record, the devices that are already set with anti-passback function cannot be viewed in the drop-down list of Device during the anti-passback adding. If a set anti-passback record is deleted, the corresponding device will return to the drop-down list of Device. The settings are different if the number of doors controlled by the panel is different.

Anti-passback can be set for read heads and doors by the panels. If a cardholder comes in through Door A, he/she must go out through Door B. This function mainly applies to passage control and entrance ticket control.

- Anti-passback for one-door panel and that for read heads.
- Anti-passback for two-door panel:

Anti-passback for the read heads of Door-1, anti-passback for the read heads of Door-2, and anti-passback for Door-1 and Door-2.

- Anti-passback for four-door panel:

Anti-passback for Door-1 and Door-2, anti-passback for Door-3 and Door-4, anti-passback for Door-1/Door-2 and Door-3/Door-4, anti-passback for Door-1 and Door-2/Door-3, anti-passback for Door-1 and Door-2/Door-3/Door-4, anti-passback for the read heads of Door-1, anti-passback for the read heads of Door-2, anti-passback for the read heads of Door-3, and anti-passback for the read heads of Door-4.

Note: The read heads above include the Wiegand read heads and inBIO read heads connected to access control panels. The Wiegand read heads of one-door panel and two-door panel are divided into entrance read heads and exit read heads, and the read heads of four-door panel are all entrance read heads. Among the inBIO read heads, the read heads 1 and 2 (RS485 address (or device number) is 1 and 2, the same below) correspond to Door 1, the read heads 3 and 4 correspond to Door 2, the read heads 5 and 6 correspond to Door 3, and the read heads 7 and 8 correspond to Door 4. In anti-passback settings for the doors or the read heads, whether the read head is Wiegand read head or inBIO read head does not matter. Set the anti-passback as required by determining it is entrance or exit status (the current read head is entrance read head or exit read head).If the number of a Wiegand read head or the RS485 address is odd number, it is an entrance read head; if an even number, an exit read head.

3. Select one rule in the drop-down list of Anti-Passback (the anti-passback with different doors or read heads can be multi-selected). Click [OK] to finish the settings. The added anti-passback is displayed in the list.

Note: In the editing, only the anti-passback can be modified, and the device cannot be changed. If a device needs to disable its anti-passback function, delete its corresponding anti-passback record. In deleting a device record, its anti-passback record will be deleted together.

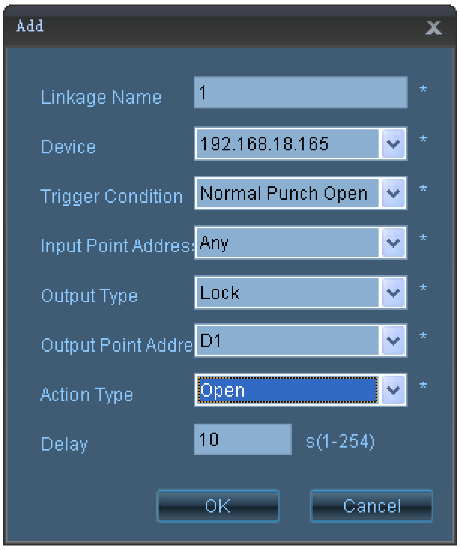
4.7.3.8 Linkage

Linkage refers to a linkage action generated at an appointed output point after a specific event happening at an input point in the access control system. Linkage actions control the verification, door opening, alarm generating, and abnormalities in the system. The actions can be viewed in the monitored event list.

Operation steps for adding linkage:

1. Click **Access Control** > **Linkage** > **Add** to enter into the Linkage Settings interface;

2. Input the **Linkage Name** (a device can be selected only if the Linkage Name is input), and select a device. The Linkage Settings interface is displayed. (The system prejudges if the device is connected and reads the device extended parameters, such as the auxiliary input number, auxiliary output number, number of doors, and number of read heads. If no device extended parameters are available, the user will be prompted that the linkage failed. Otherwise, the items for linkage settings will be displayed based on the number of doors, auxiliary input number, and auxiliary output number of the selected device.)



Description for each field:

Trigger Condition: Please refer to the *Description for Real-Time Events*, among which except for the linkage-trigger events, alarm cancellation, auxiliary output enabling, auxiliary output disabling, and device starting, the others can all be trigger conditions.

Input Point Add: Any, Door 1, Door 2, Door 3, Door 4, Auxiliary input 1, Auxiliary input 2, Auxiliary input 3, Auxiliary input 4, Auxiliary input 9, Auxiliary input 10, Auxiliary input 11, and Auxiliary input 12. (Please refer to the specific device parameters of a device for its specific input point addresses).

Output Point Add: Door lock 1, Door lock 2, Door lock 3, Door lock 4, Auxiliary output 1, Auxiliary output 2, Auxiliary output 3, Auxiliary output 4, Auxiliary output 6, Auxiliary output 8, Auxiliary output 9, and

Auxiliary output 10; (please refer to the specific device parameters of a device for its specific input point addresses).

Action Type: Close, Open, Normal Open. By default this field is Close. If Open is selected, the Delay field needs to be set. Or select Normal Closed.

Delay: ranges from 1-254s (effective only when the action type is Open).

3. After editing, click ***OK*** to save and exit. The added linkage is displayed in the linkage list.

For example, if **Open a door by card** is selected as the trigger condition, the input point: Door 1, the output point: Door lock 1, the action type: Open, and the Delay range: 60s, then when you "open the door by swiping a card", a linkage action "Open" will be generated at Door lock 1, and the door will be open for 60s.

Note: In the editing, only the linkage name and configuration items can be modified, and the device cannot be changed. In deleting a device, its linkage record will be deleted together.

If the system appoints a specific door as the input point for a device under certain trigger condition or sets up the auxiliary input point for the device, it does not allow to add (or edit) a linkage with the same trigger condition, with its input point set to "Any", and for the same device.

Otherwise, if the device and trigger condition are the same, and in the system exists a linkage with the input point "Any", the system does not allow to add (or edit) a linkage with its input point being a specific door or an auxiliary input point.

In addition, the system does not allow a device to have a linkage with the same input point and output point under specific trigger conditions.

One device allows multiple times of logical (as stated above) linkage settings.

4.7.3.9 First-Card Normal Open

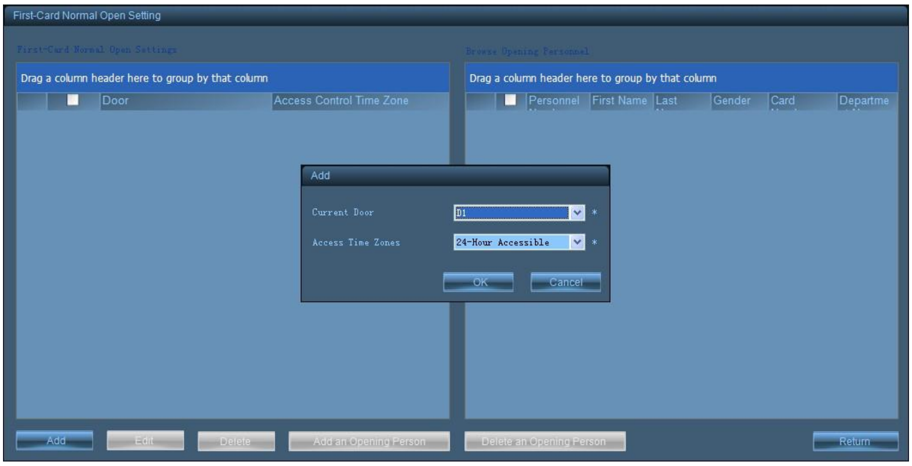
First-Card Normal Open: In certain access time zone, after the personnel with the First-Card Normal Open permission open a door by swiping a card, the door will be normally open and automatically close at the end of the effective access time zone.

The user can perform the First-Card Normal Open settings for a specific door. The settings determine the door, the access time zone for door opening, and the personnel with the First-Card Normal Open permission. The First-Card Normal Open settings in several access time zones can be performed for a door. The interface of each door displays the existing number of First-Card Normal Open settings. In the First-Card Normal Open settings for a door, the "Current Door" does not need to be modified in adding or editing. You only need to select the access time zones. After successfully adding the access time zones, add the personnel with First-Card Normal Open permission. You can view the personnel with the First-Card Normal Open permission and delete them on the right side of the interface to revoke their First-Card Normal Open permission.

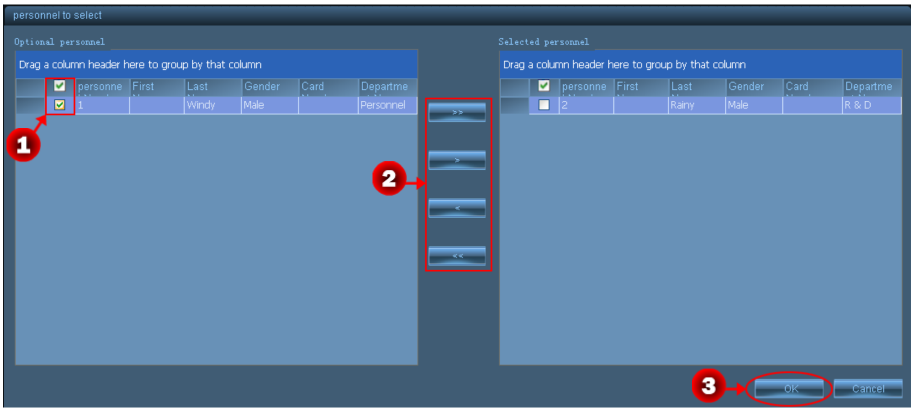
Operation steps for adding First-Card Normal Open:

1. Click **Access Control** > **First-Card Normal Open** to enter the First-Card Normal Open Setting interface;

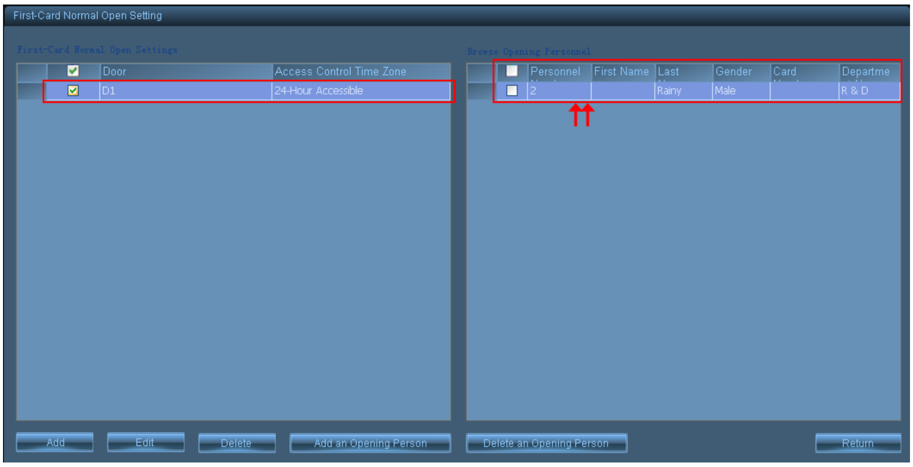
2. Click **Settings** > **Add**, select the Access Time Zones for **First-Card Normal Open**, and click ***OK*** to save and exit;



3. Select the door for **First-Card Normal Open**, click Add an Opening Person to pop-up



Set personnel with First-Card Normal Open permission. The personnel must have access permission to perform First-Card Normal Open. Click ***OK*** to save and exit.



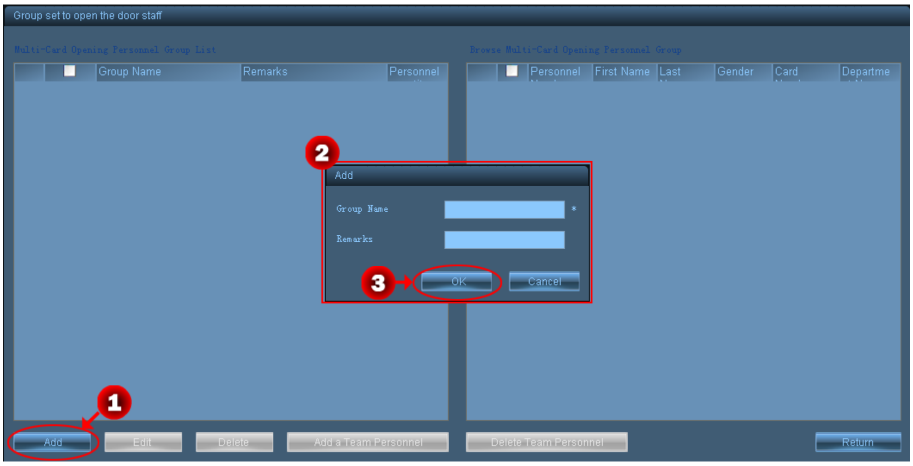
Note: Swipe the card with access permission to a door under Normal Open status for **5** times in succession (the time interval among each card swiping cannot exceed **5s**), the Normal Open status is disabled and the door is closed. After the fifth card swiping, the door can be opened by normal card swiping. This function must be performed within the effective access time zones, and performing it disables all other First-Card Normal Open settings and all other access time zones with First-Card Normal Open settings.

4.7.3.10 Multi-Card Opening

1. Multi-Card Opening Personnel Group

The function of Group set to open the door staff groups the staff. The groups are used for Multi-Card Opening combination settings.

(1) Click **Access Control** > **Multi-Card Opening** > **Multi-Card Opening Personnel Group** > **Add** to enter the Multi-Card Opening Personnel Group editing interface.



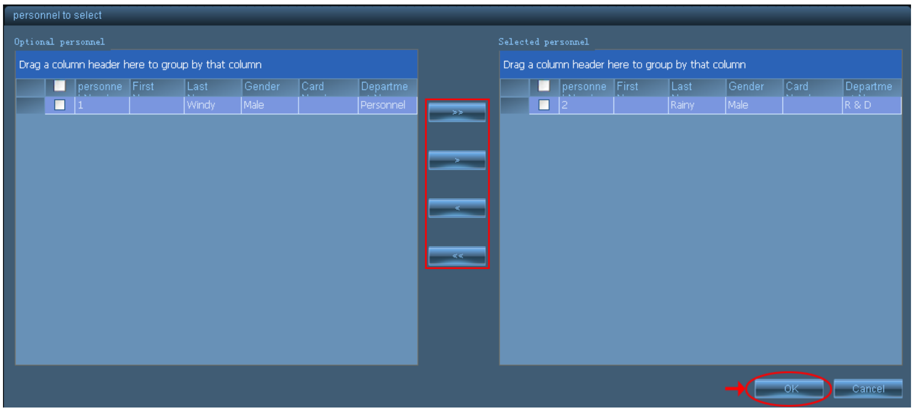
Group Name: can be any characters, allowing at most 50 any characters, and not allowing repeating the existing group names.

After editing, click [**OK**]. The added multi-card opening personnel group is displayed in the list.

(2) Select a group, and click 

to add this group.

(3) After adding the personnel, click [**OK**] to save and return.



Note: One person belongs to only one group, and cannot be assigned to several groups.

2. Multi-Card Opening: sets permission for the personnel in [Multi-Card Opening Personnel Group].

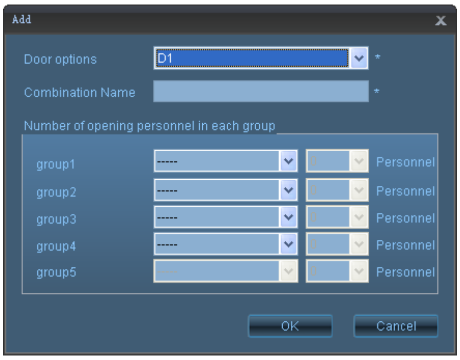
Under some specific access control circumstances this function needs to be enabled. It demands the appointed personnel in a multi-card opening combination to be present. Each one of them swipes their cards in proper order to pass the verification. Before passing the verification, other cards cannot be

inserted (even if it is a valid card of other combinations for the same door); otherwise a second time of verification can be done after 10s. Only one person cannot open the door by swiping his/her card.

Multi-Card Opening combination refers to the combination comprising one or several multi-card opening personnel groups and the personnel in the groups. In determining the number of opening personnel in each group, one (for example, 2 persons in one group open a door simultaneously) or several groups (for example, each group has 2 persons, and the 4 persons of two groups open a door simultaneously) can be set. At least the number of opening personnel in one group cannot be 0, and the total number of all opening personnel cannot exceed 5. In addition, if the number of opening personnel input by the user exceeds that of the current groups, the Multi-Card Opening function cannot be performed.

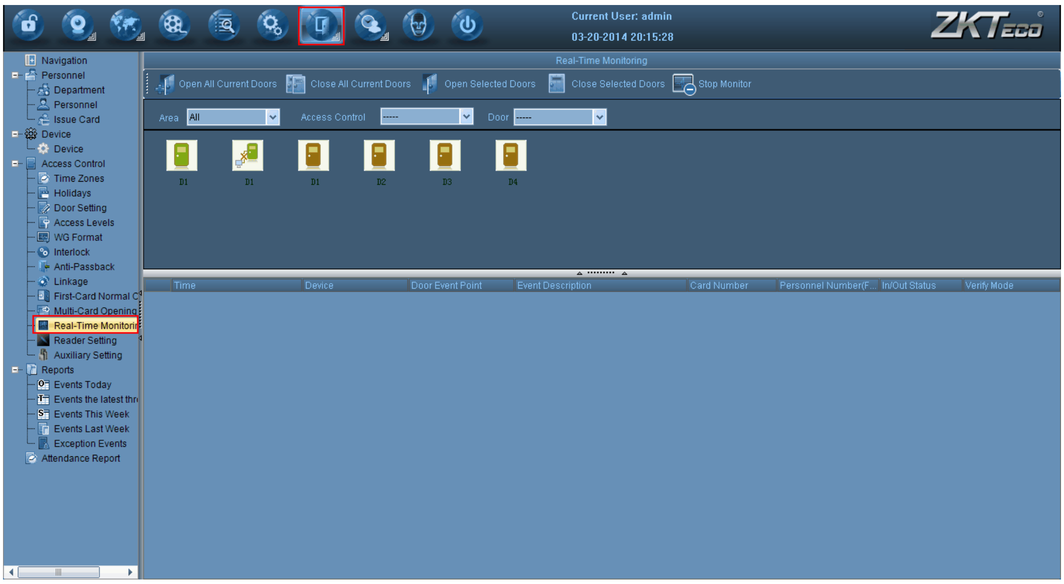
Operation steps for adding multi-card opening:

(1) Click **Access Control** > **Multi-Card Opening** > **Add** to enter the multi-card opening Add interface;



(2) The maximum number of opening personnel for simultaneous multi-card opening is 5. The number in the brackets is the current actual number of opening personnel in each group. Set the number of opening personnel in a group for simultaneously opening a door, and click [**OK**] to finish the settings.

4.7.3.11 Real-Time Monitoring

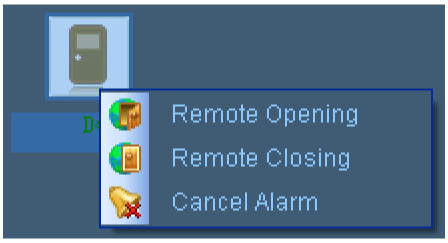


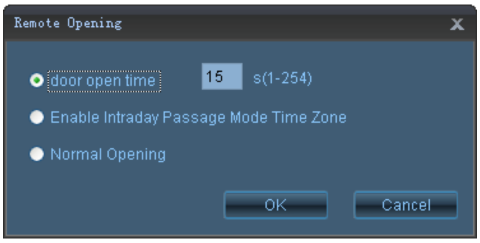
The status of doors of access control panels in the system and real-time events are monitored, including normal events and abnormal events (including alarm events) and so on.

1. Monitoring All

By default the home page of the Real-Time Monitoring interface displays all doors of the panels within the user's permission scope. The user can monitor one (or several) door by setting the **Area**, **Access Control** or **Door**.

Remote Opening/Closing a Door: controls one door or all doors. To control a single door, right click mouse, and click [Remote Opening/Remote Closing] in the pop-up dialog box. To control all doors, click [Open/Close All Current Doors].



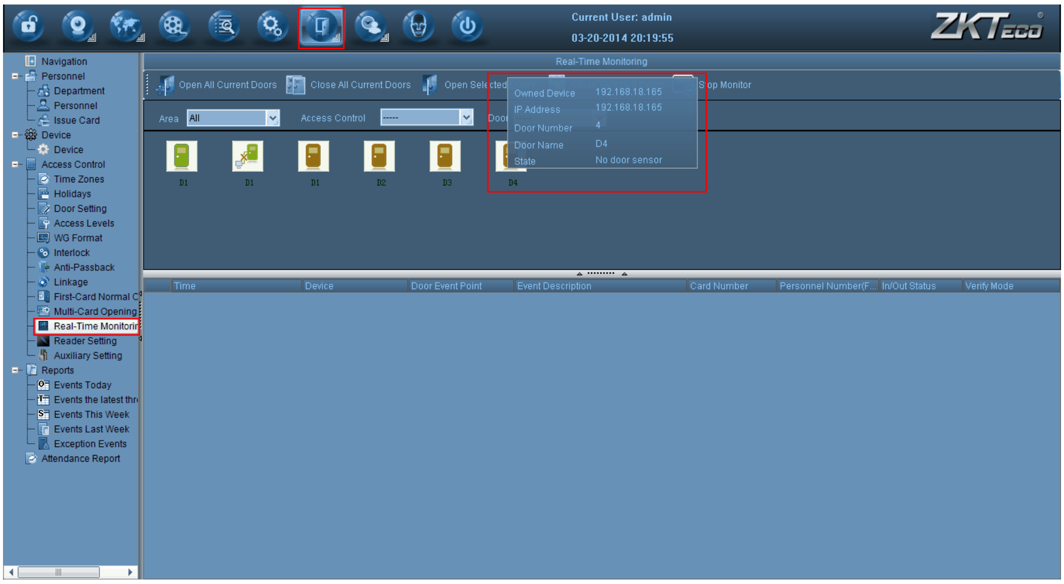


In remote opening a door, the user can define the duration of a door being open in the pop-up dialog box. The default duration is 15s. You can select [Enable the Intraday Door Passage Mode Time Zone] to enable the intraday door passage mode time zones set by the system. You can also set the door status to Normal Open, so the door is not limited by any time zones (open for 24 hours).

To close a door, select [Disable the Intraday Door Passage Mode Time Zone] first to avoid enabling other normal open time zones to open the door, and then select [Remote Closing a Door].

Note: If the remote opening or closing a door always fails, please view the Device list to check if many devices are disconnected. If any, please check the network; otherwise the operation cannot be performed.

Place the cursor onto the icon of a door, the relevant parameters of the door will be shown, including the Owned Device, Door Number, and Door Name, and three operations for a single door, including remote opening a Door, remote closing a door, and alarm cancellation. The state indicated by each icon is as follows:



Icon							
State	Door alarm	Door closed under the on-line state	Door opened under the on-line state	No door sensor	Device forbidden	Door under the off-line state	Door opened over time

2. Personnel Photo Display

If the real-time monitoring involves personnel and the personnel set up their photos, their photos will display in the monitoring. The event name, time, and the names of personnel are shown in the photos.

3. Event Monitoring

The system automatically acquires the monitored device event records, including normal door events and abnormal door events (including alarm events). The alarm events are marked in red, the door abnormal events except for the alarm events are marked in orange, and normal door events are marked in green.

The latest record of the currently monitored events is at the top. You can view the latest monitoring record without dragging the scroll bar. The maximum records simultaneously displayed in the interface are about 100.

4.7.3.12 Reader Setting

- **Reader Name editing**

Click **[Access Control]** > **[Reader Setting]**, choose a reader, click [Edit], then input the reader name.

✍ **Note**: The parameter is not for Standalone SDK Machine, because there is no In/Out state in it. There are two readers in a door of Controller and Standalone Access Control, representing in and out state. In Reports and Real-Time Monitoring, the reader names will be displayed in In/Out Status.

- **Reader Name Logs**

Choose a reader, click , then you can check logs of the reader.

4.7.3.13 Auxiliary Setting

- **Auxiliary In/Out name editing**

Click **[Access Control]** > **[Auxiliary Setting]**, choose an auxiliary, click [Edit], then input the Auxiliary In/Out name.

- **Auxiliary In/Out name Logs**

Choose an auxiliary, click , then you can check logs of the auxiliary In/Out name.

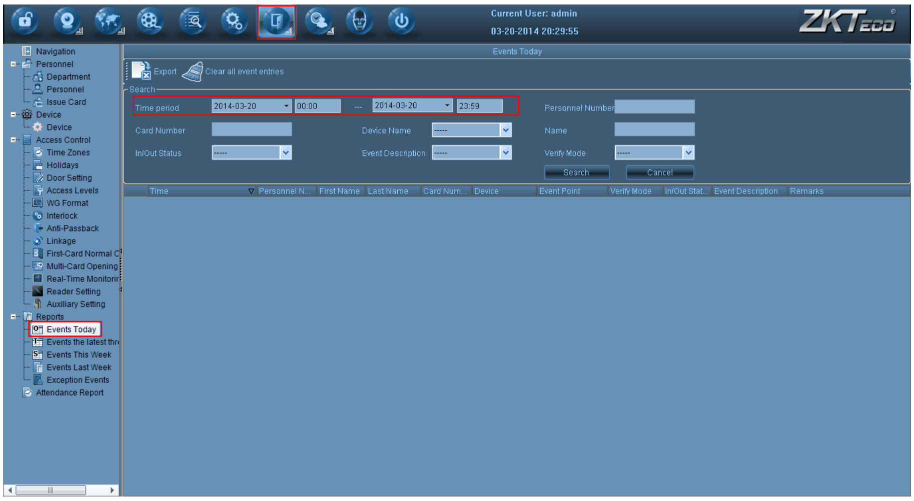
4.7.4 Access Reports

Include [Events Today], [Events the Latest Three Days], [Events This Week], [Events Last Week], and [Exception Events] reports. You can select Export All or Export after Query. A can perform statistical analysis based on the reports, including card verification, door operation, and normal card swiping.

Note: Only the event record generated when the user uses Emergency Password to open a door contains the verify mode [Password Only].

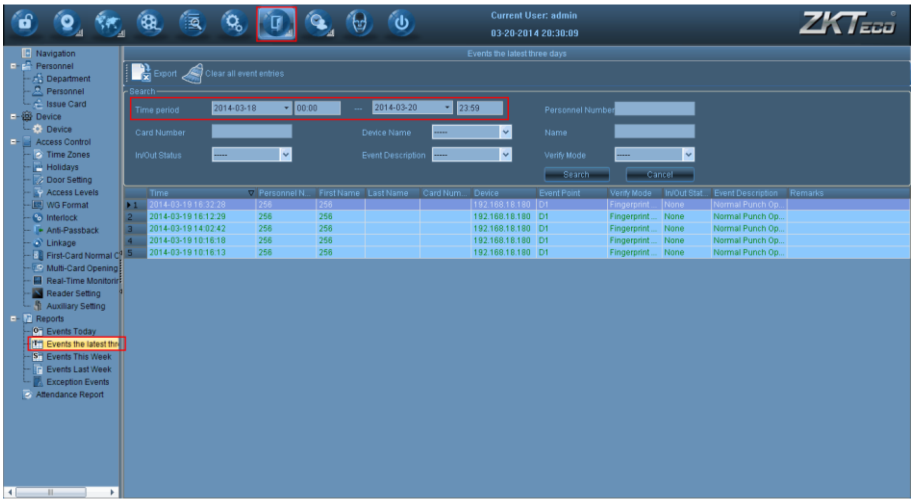
4.7.4.1 Events Today

Click **Report** > **Events Today** to enter the following interface. The record of the intraday door events is displayed.



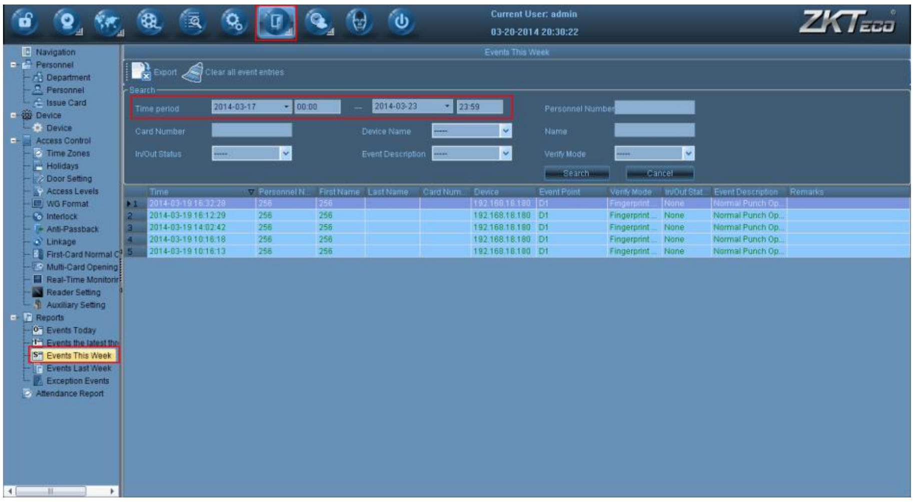
4.7.4.2 Events the Latest Three Days

Click **Report** > **Events the Latest Three Days** to display the record of the door events of the latest three days.



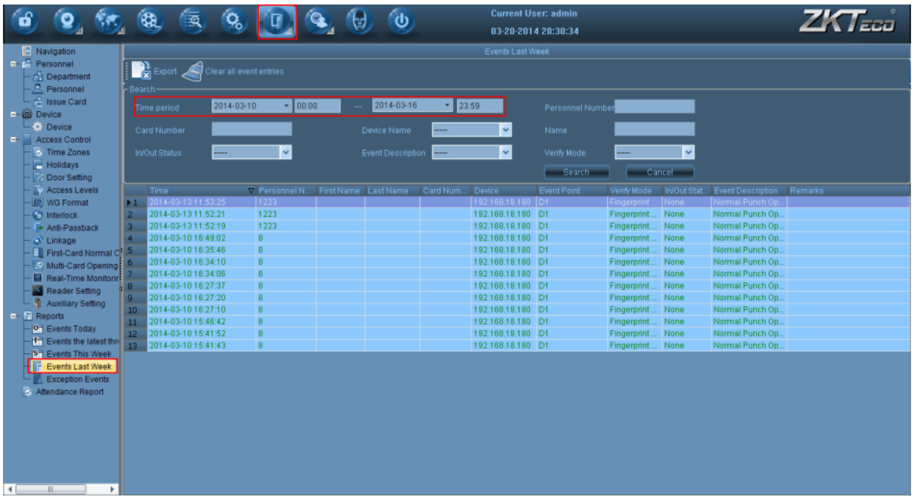
4.7.4.3 Events This Week

Click **Report** > **Events This Week** to display the record of the door events of the nearest week.



4.7.4.4 Events Last Week

Click **Report** > **Events Last Week** to display the record of the door events of the last week.



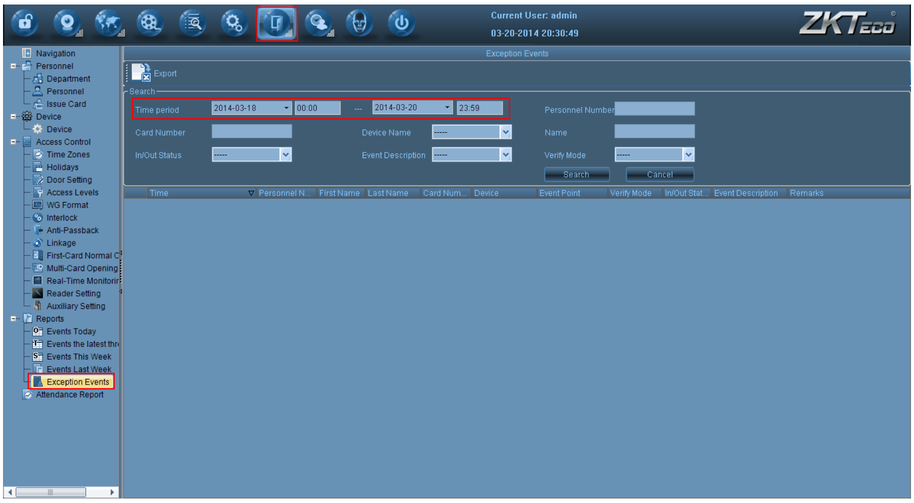
4.7.4.5 Exception Events

Exception events under specified requirements can be viewed.

Clear All Exception Event Entries: clears all the exception event lists.

Door Status Real-Time Monitoring: displays not only the e-map, but also the event monitoring (consistent with the door status monitoring data, including alarm sound and so on).

Door Operation: Place the cursor onto a door icon and the system automatically filters and displays the operation type based on the door status. The user can perform remote opening/closing a door, and alarm cancellation and so on.



Annex: ***Description for Real-Time Events***

1. Normal Events

Normally open a door by card: refers to normal events triggered by the personnel with opening permission using a card and passing the verification under the **Card Only** verify mode.

Normally open a door by fingerprint: refers to the normal event triggered by the personnel with opening permission using his/her fingerprint and passing the verification under the **Fingerprint Only** or the **Card or Fingerprint** verify mode. **Open a door by card and fingerprint:** refers to the normal event triggered by the personnel with opening permission using a card and his/her fingerprint and passing the verification under the **Card and Fingerprint** verify mode.

Open a door by button switch: refers to the normal event triggered by pressing the button switch to open a door in effective time zones.

Swipe a card in door passage mode time zone: refers to the normal event triggered by swiping a card to a door when the personnel with opening permission have already opened the door by remote normal open operation in the door passage mode time zone and the door is being open.

First-card normal open card swiping: refers to the normal event triggered by the personnel with the First-Card Normal Open permission swiping a card and passing the verification in the first-card normal open time zone when the door is closed and under the **Card Only** verify mode.

Door passage mode time zone ended: When the set door passage mode time zone is over, the door will be closed automatically. The door passage mode time zone includes the door passage mode time zone of a door and the time zone with the First-Card Normal Open settings.

Remote normal open: refers to the normal event triggered when a door is opened by remote opening and is set to normal open.

Disable the intraday door passage mode time zone: refers to the normal event triggered by swiping a valid card (must be the same user's card) for 5 times in succession on a read head or using the [Disable the Intraday Door Passage Mode Time Zone] operation in remote closing a door when a door is under the normal open status.

Enable the intraday door passage mode time zone: refers to the normal event triggered by swiping a valid card (must be the same user's card) for 5 times in succession on a read head or using the [Enable the Intraday Door Passage Mode Time Zone] operation in remote opening a door when the intraday door passage mode time zone of a door is disabled.

Open a door by multi-card opening: refers to the normal event triggered when the last card passing the verification in multi-card opening under the **Card Only** verify mode.

Open a door by emergency password: refers to the normal event triggered by using the emergency password (also called **super password**) of a door to open it and passing the verification.

Open a door in door passage mode time zone: refers to the normal event triggered when a door is automatically opened at the set time if it is set with door passage mode time zone.

Event to trigger linkage: refers to the normal event triggered when a set linkage in the system becomes effective.

Alarm cancellation: refers to the normal event triggered when the user successfully cancels the alarm operation of a door.

Remote opening a door: refers to the normal event triggered when the user successfully opens a door remotely.

Remote closing a door: refers to the normal event triggered when the user successfully closes a door remotely.

Enable auxiliary output: refers to the normal event triggered when a linkage becomes effective, of which the output point address is set to an auxiliary output point and the action type is set to **Open.**

Disable auxiliary output: refers to the normal event triggered when a linkage becomes effective, of which the output point address is set to an auxiliary output point and the action type is set to **Open**. In addition, the normal event will also be triggered if the user uses **Door Setting** > **Disable the Auxiliary Output** to disable an enabled auxiliary output point.

Door opened: refers to the normal event triggered when the door sensor senses the door being opened normally.

Door closed: refers to the normal event triggered when the door sensor senses the door being closed normally.

Auxiliary input point disconnected: refers to the normal event triggered when an auxiliary input point is disconnected.

Short circuit of auxiliary input point: refers to the normal event triggered when short circuit of an auxiliary input point happens.

Start a device: refers to the normal event triggered when a device is started. This event is not displayed in the real-time monitoring and can be viewed in the event log of the Record.

2. Abnormal Events

Too short card swiping interval: refers to the abnormal event triggered when the interval between two times of card swiping is shorter than the set interval of the door.

Door non-active time zone (card): refers to the abnormal event triggered by swiping a card with opening permission to the current door in its non-active time zone under the **Card Only**.

Door non-active time zone (button switch): refers to the abnormal event triggered by pressing the button switch to open a door in its non-active time zone, by which the door cannot be opened.

Invalid time zone: refers to the abnormal event triggered by swiping a card with opening permission to a door in the time zone beyond those set with access control of the door.

Illegal access: refers to the abnormal event triggered by swiping a registered card to a door that does not set with access control.

Anti-passback: refers to the abnormal event triggered when an anti-passback set in the system becomes effective.

Interlock: refers to the abnormal event triggered when an interlock set in the system becomes effective.

Multi-card verification: refers to the abnormal event triggered by the verification of the cards (regardless of passing or not) except for the last card in multi-card opening.

Card unregistered: refers to the abnormal event triggered by a card number unregistered in the system.

Door opened over time: refers to the abnormal event triggered when a door is detected being open by the door sensor and its opening duration is over time.

Overdue card: refers to the abnormal event triggered when the personnel who set the access control period swipe a card and cannot pass the verification beyond the access control period.

Wrong password: refers to the abnormal event triggered by wrong password in opening a door by the Card and Password verify mode, or the duress password or the emergency password.

Unable to close a door in its door passage mode time zone: refers to the abnormal event triggered when a door in the normal open status cannot be closed by the [Remote Closing a Door] operation in the remote closing a door.

4.7.5 Attendance Reports

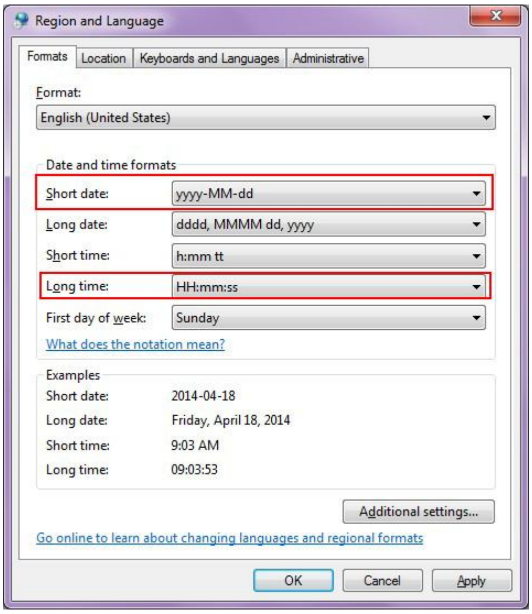
View the Attendance Reports. For detail, please see 4.8.4.1 Att Report.

4.8 Attendance Function

Attendance management enables enterprises to realize informatization management of the personnel attendance. It aims at automating the process of data collection, data statistics and information search of personnel attendance, improving the modernization of personnel management and providing convenience to sign-in for work. It also helps managerial personnel to add up and check the attendance situation as well as management departments to check and assess the attendance rate of each department; in this way, the attendance situation is properly obtained, and the personnel mobility is effectively obtained and managed.

The major functions that the attendance management system realizes mainly include: Employee Schedule, attendance record maintenance (attendance record inquiry, Leave/Business, Forgot Clock-In/Out, collective Late/Leaving Early), and attendance report management.

The system time and date shall be set according to the standard formats, which are yyyy-MM-dd and HH:mm:ss, to guarantee an accurate attendance check. Please set the formats in **Control Panel** > **Region and Language** as follows:



The above figure is the setting of WINDOW 7. The formats can be set in other systems likewise.

4.8.1 Device Management

Add devices to the system and maintain devices; specific operation methods, please see 4.7.2 Device.

4.8.2 Employee Schedule

If employee has not been scheduled, then at finally system is unable to statistic the Time Attendance records, if a employee did not belong to shift the system will be unable to distinguish his Time Attendance record which was goes to work or gets off work, and fail to count his Time Attendance.

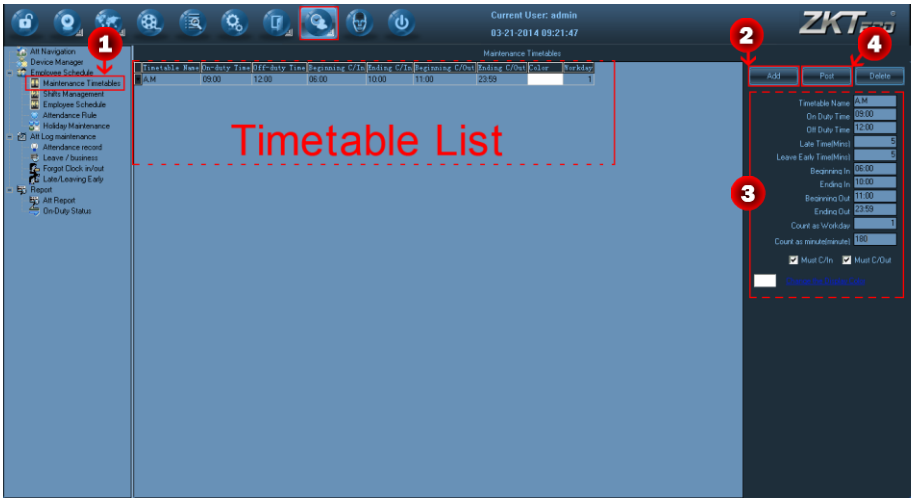
The **Employee Schedule** contents the following operations: **Maintenance Timetable**, **Shifts Management**, **Employee Schedule**, **Attendance Rule** and **Holiday Maintenance**.

4.8.2.1 Maintenance Timetable

Set the timetable that may be used for attendance and configure necessary parameter information. The timetable is the minimum unit to set up the staff attendance time. For example, working hours, allowance for arriving late or leaving early, compulsory signing in or signing off, allowed time range of signing in or signing off and other settings. All the possibly used time periods should be set (attendance timetable setting) before the shifts are set. The schedules can be made only after the attendance timetable is set. All kinds of attendance parameter settings then make sense.

- **Add Timetable**

1. Click **Maintenance Timetable** > Add to enter the Add Timetable interface:



The field of meaning in Timetable settings

Timetable Name: A maximum of 20 characters in any combination is allowed.

On Duty Time/Off Duty Time: The setting for On Duty Time and Off Duty Time is compulsory.

Late Time (Mins): As above figure show, the setting value is 5 minutes, Illustration's On Duty Time is 09:00. E.g. A. Clock In at 09: 03, B. Clock In at 09: 07, so the A is not coming late, because he check-in

time is not over 5 minute, the B is coming late for 7 minutes, because he check-in time is over for 2 minute.

Leave Early Time (Mins): It is the same as **Late Time**, depend on the difference between the clocking out time and the Off Duty Time.

Beginning /Ending In: Must input. Within check-in range of This Timetable the record regard as validity, outside this scope checking record is the invalid record.

Beginning/Ending out: Must input. Within check-in range of This Timetable the record regard as validity, outside this scope checking record is the invalid record. Begin and End Clocking out time can not overlay.

Count as workday: Refers to each Shift record how many working days, if here the value has been set, the program will defer to the setting value to statistics working day, otherwise according to Time Attendance rule in option statistics.

Count as minute: The period of this Timetable will be recorded how long time in the **Report**, may set it by user. For example: a Timetable's reality length is 9 hours, may record it as 8 hours, also records in the **Report** this Timetable is 8 hours.

Must C/In and Must C/Out: According to the different post and the different request may definite the Shift Timetable whether has to check out/in.

Change the Display Color: May change each Shift Timetable color, used to differentiate each different Shift. Just left-click the color with the mouse, the color will be modified.

2. Set parameters as required, and click **[Save]** to save the configuration.

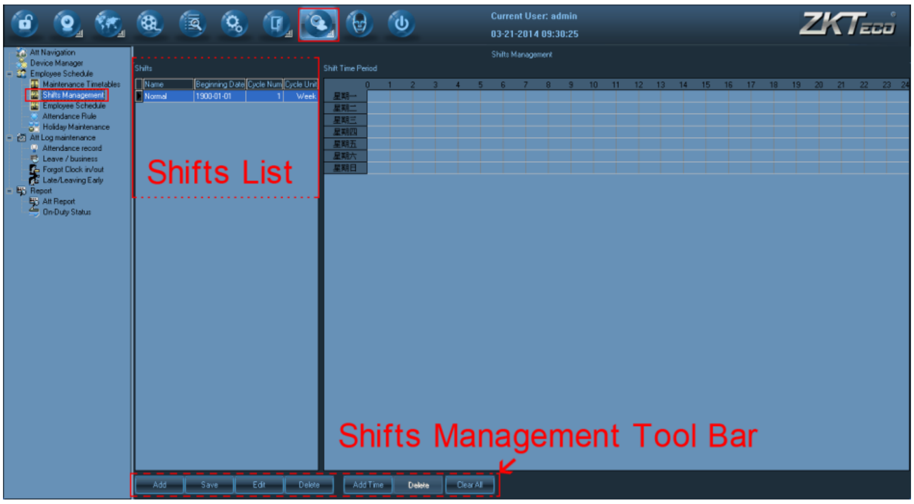
- **Edit / Delete Timetable**

Edit Timetable: In **Attendance Timetable**, select the attendance timetable to be edited and modify the parameters as required. Click **[Save]** to save the modification.

Delete Timetable: In **Attendance Timetable**, select the attendance timetable to be deleted. Click the **[Delete]** button to delete selected attendance timetable.

4.8.2.2 Shifts Management

Click **Attendance Function** icon > **Shifts Management** to enter the **Shifts Management** interface:



Shift is comprised of one or multiple preset attendance timetables in a certain sequence and cycle period. It is a preset working timetable for the staff. To check attendance, the shift should be set at first.

This window may be divided into **Shifts List** and **Shift Time Period**, the **Shifts List** include Shift **Name**, **Beginning Data**, **Cycle Num** and **Cycle Unit**.

Name: The shift name can't be repeated, and all the fields in the form can't be empty.

Beginning Data: Application Beginning Date is in the form of **yyyy-mm-dd,** for example, **January** the **15th, 2014** is recorded as **2014-01-15**, and **March** the **6th, 2014** is recorded as **2014-03-06.**

Cycle Num: Shift cycling periodicity = **Cycle Num** * **Cycle Unit.**

Cycle Unit: Cycle unit consist of day, week, months

Shift Management Tool Bar to add, cancel, modify shift. Under the status of adding or editing shifts (when 

button is valid), you may Add/Edit/Delete Shift Time Periods.

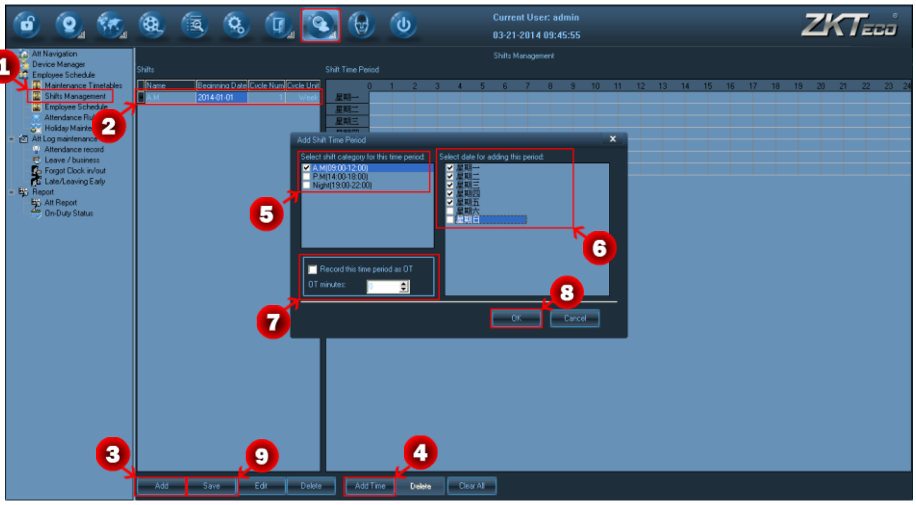
- **Add Shift**

1. Single-click 

button to **add a new Shift**, the blank Shift Timetable will appear in the right side, set **Name**, **Beginning Data**, **Cycle Num**, **Cycle Unit as required**

2. Click 

button, following window will popup:



3. Select a Timetable for the Shift and select date. You make a mark "☑" on the day you selected.

4. Record this time period as OT or not. (If the time period is recorded as overtime, the overtime minutes should be set.)

5. Click "**OK**" button to save settings

- **Shifts Maintenance**

Delete Shift: Choose a Shift that want to be deleted, click 

button to delete.

Edit: Choose a Shift that want to be edited, click 

to edit.

Delete Time Period: Click on 

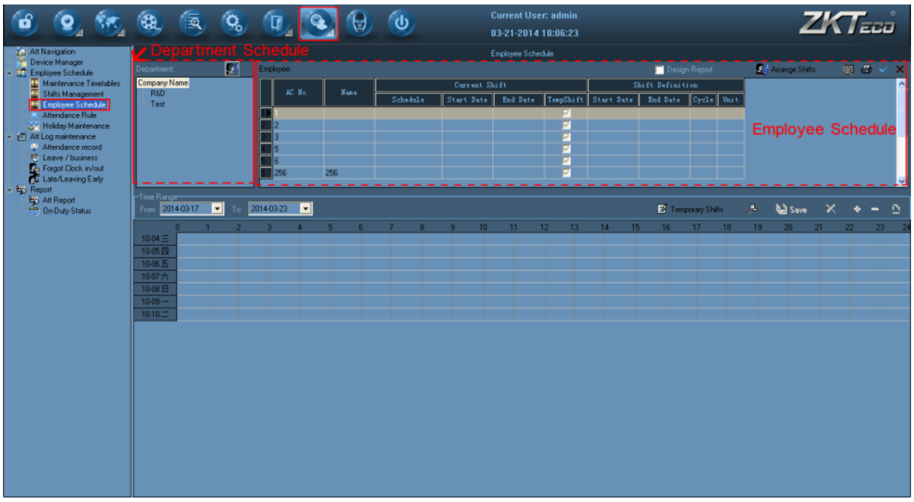
button, selected Time Period will be deleted.

Save: After a Shift has been edited or added, click 

button to save related information.

4.8.2.3 Employee Schedule

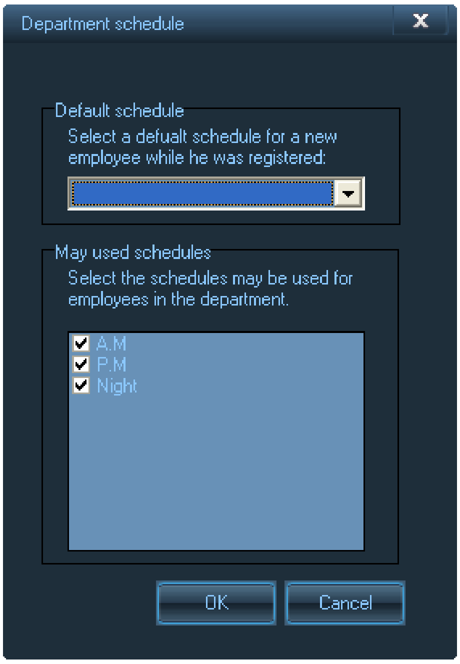
Click **Attendance Function** icon  > **Employee Schedule** to enter the **Employee Schedule** interface:



Left side of the window demonstrates that shift schedule depending on the department. Click department name with mouse, can show all employees and its Shift Schedule in the right side employee module.

1. Assign Employee Shift by department

According to the different department's characteristic to assign employee shift, Single-click Department Schedule button on the left angle, the following tooltip popup:

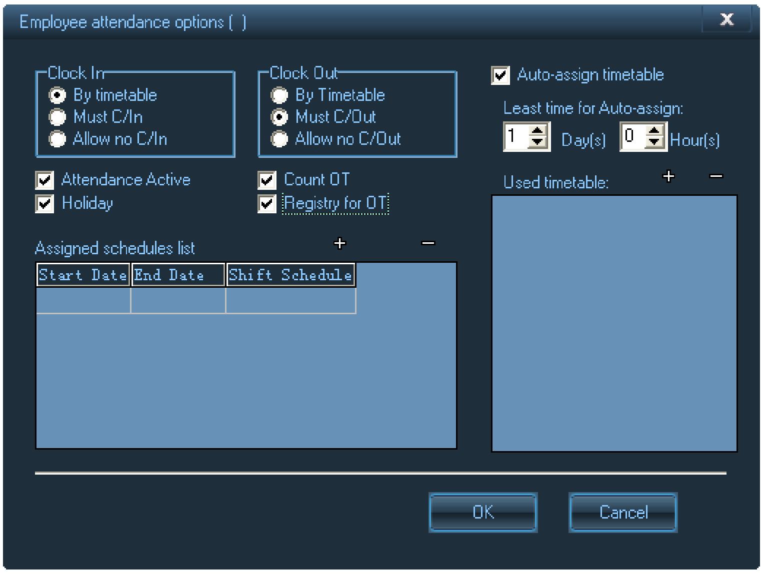


Default schedule: Select a shift from drop-down menu, make it as default Shift which is used for enrolling new employee, after enrolling new employee it will give new employee a shift.

May used schedules: Able to display name of current setup shift in the shift schedule list, when arrange department shift, the shift will not display list until selected shift.

2. Normal Assign employee Shift

The right side or the window is the assignment employee shift the module. Assign employee shift not only individual all, but also by the batch. Click all choice button to assign all employees shift. In the employee's list, hold down the **Ctrl** key and with the mouse single-click the employee to complete the multiple-choice, choose the employee who needs to be assigned to shift ,then click Arrange Employee's shifts button Arrange Shifts the following window popup:



Clock In/Out: May set whether employee has to Clock in/out, according to the corresponding time Period to judge whether need to Clock in/out the setting privilege in this project is higher than one in Shift Timetable setting.

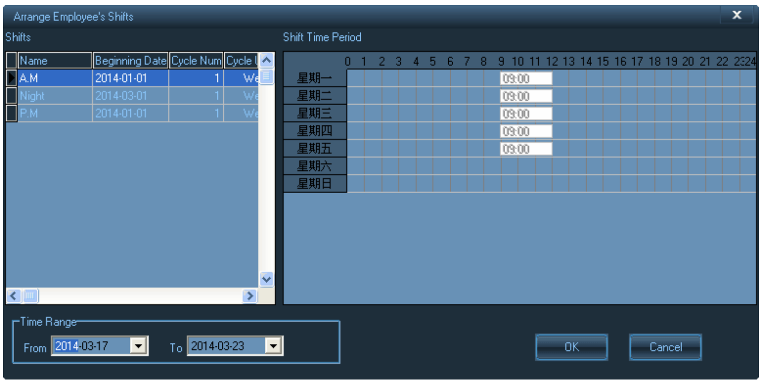
Attendance Active: Refers whether Time Attendance is effective or not, after choosing this item, according to the Time Attendance rule and the shift schedule, total of Time Attendance record is available, otherwise, this employee will not participate in Time Attendance, whose records regard as normal work. For example some leaders do not need to count the Time Attendance for normally go to work.

Count OT: After choosing this item, ability to calculate this employee's working overtime.

Holiday: After choosing this item, this time the employee who has been assigned shift will rest in the holiday, if he/she will go to work, his/her record will regard as working overtime, otherwise, this time the employee who has been assigned shift have to go to work in the holiday, if he/she does not go to work, his/her record will regard as absence from work without an excuse records.

Registry for OT: Refers to employee's all working overtime which is this time to assign employee shift must pass through the registration or the verification only ,then it take effective.

In **Assigned schedule list** under the option to be allowed to examine this employee's entire shift, may add and delete change employee's shift. Click  add key, the following window popup:



All shifts and the shift Timetable display in this window. Choose a new shift from these shifts which have been set, determine its Time Range, single-click 

button to confirm the operation or single-click 

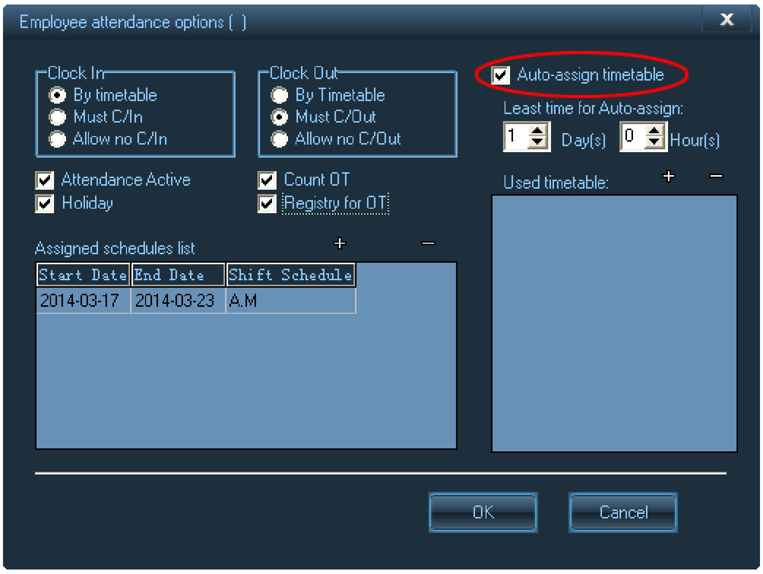
button to give up operation, and then return to the **Employee attendance options** window. After arranges successfully, the corresponding shift name will display in employee's shift column, and time list can show on-duty Time Period in the window.

While an employee shift in Normal work hours, you can add a lot of item of schedule. E.G.:

Starting date	Stopping date	Shift
2014-03-01	2014-05-30	**Spring**
20134-06-01	2014-09-01	**Summer**

3. Auto- assign timetable

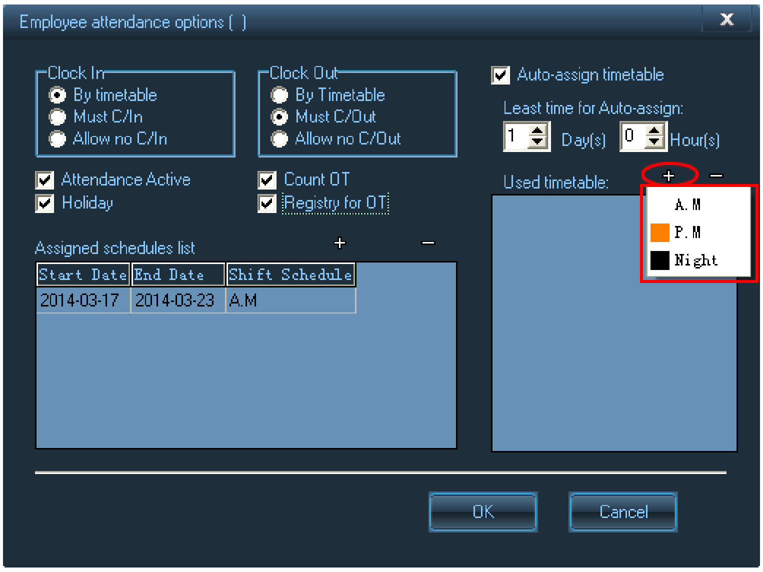
If assignment employee shifts or changing shifts schedule is too frequently, and there is not the rule to follow, auto- assigning employee shifts is available, auto- assign employee shift refers to employee does not has fixed shift schedule in the definite time, but he /she has the Time Attendance record, the system may automatically judge the Time Period which record belong to. After choosing the auto-assigning employee shift, the following interface appears:



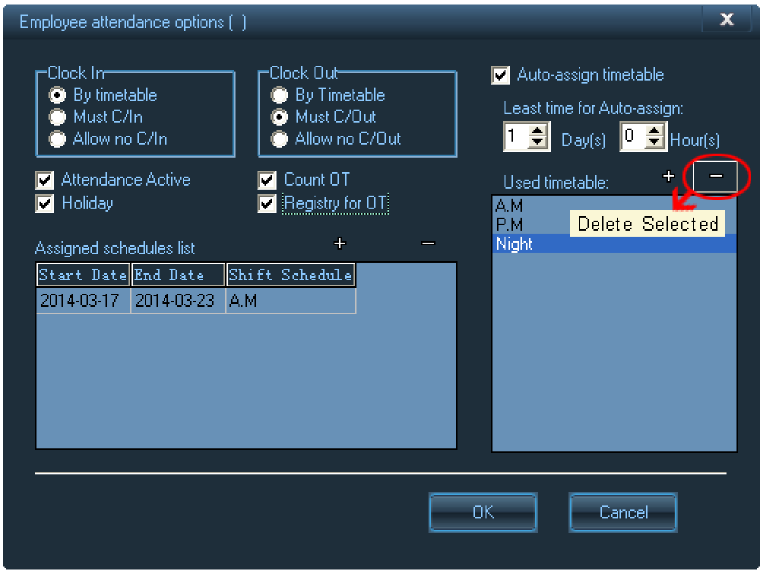
The auto-assignment employee's timetable function is that, while employee who does not assign shift to Timetable, but he/she has attendance record, the system will automatically define the Timetable. This function main use in more changes shifts.

Least time for Auto-assign: Choose the least time for auto-assign, the least time for auto-assign employee shifts refer to after you have set the time, for instance 1 day, the system only could not carry on the judgment by the shift Time Period until the time which the employee has not arranged in groups is more than 1 day, otherwise did not judge.

Used timetable: This employee possibly shift Timetable, single-click button, the choice shift Timetable appears, these shift Timetable are the name list of the set shift which have already been set in shift management. Interface as follows



Left-click shift name to select and add selected timetable. If want to delete timetable from **Used timetable**, first click and select this timetable, then click button to delete it. Shown as below:



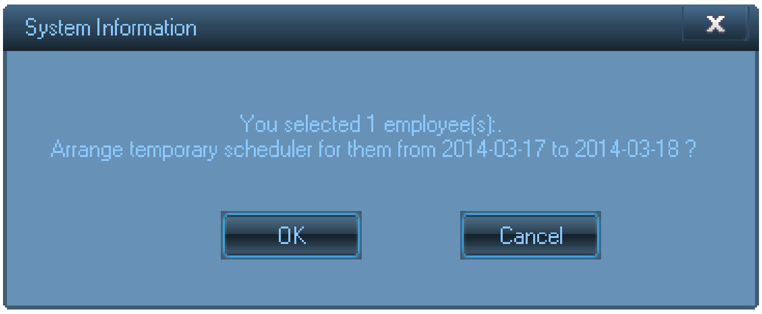
After setting, click on OK to save.

4. Employee Temporary shifts

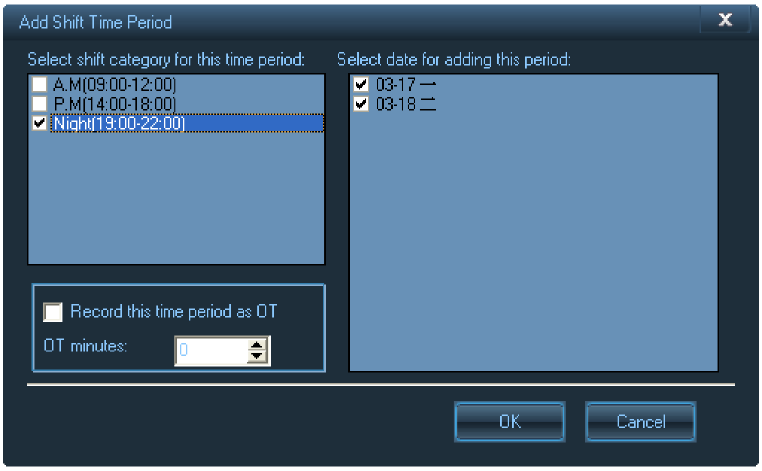
Time Range: Refers to show all employees schedule time which day start, and which day end Timetable in the below rolling region.

If one (or several) employee needs to change his/her work hours temporarily, his/her shift can be arranged temporarily. Select employee, (If you want to select a lot of employees, can hold down **Ctrl** key,

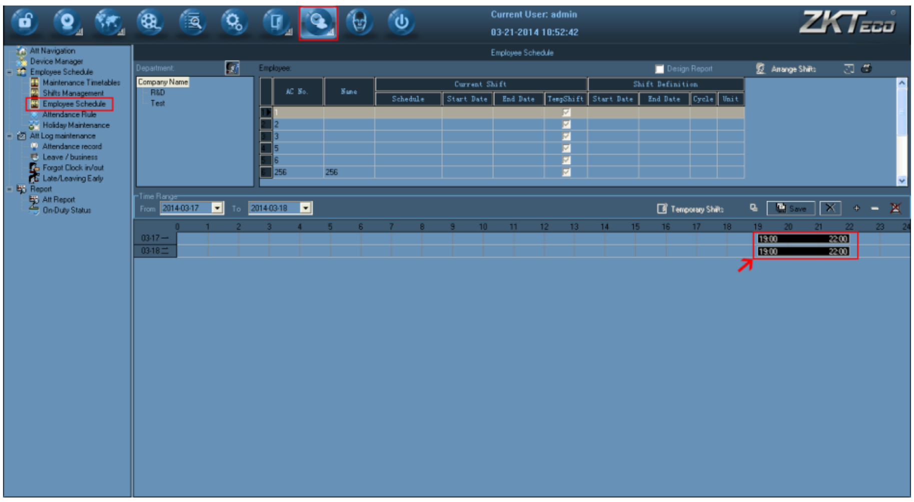
simultaneously click employee or use all choice button.) click Employee temporary arrangement button , the following tooltip will popup:



Click  button, enter temporary schedule. Click **Add Time Period** button "", the following window wills popup:



Select shift category for this time period on the window of **Add Shift Time Period**, and **select date for adding this period**. The operation method is same as add period of time at **Maintenance Shift Schedules**. Click  button, to save **Time Period** or click  to cancel the action. If select **Night (19:00-22:00)** and all date, then click  button to save and return **Employee Schedule** window. The temporarily schedule will be shown in the shift schedule list. Shown as below:



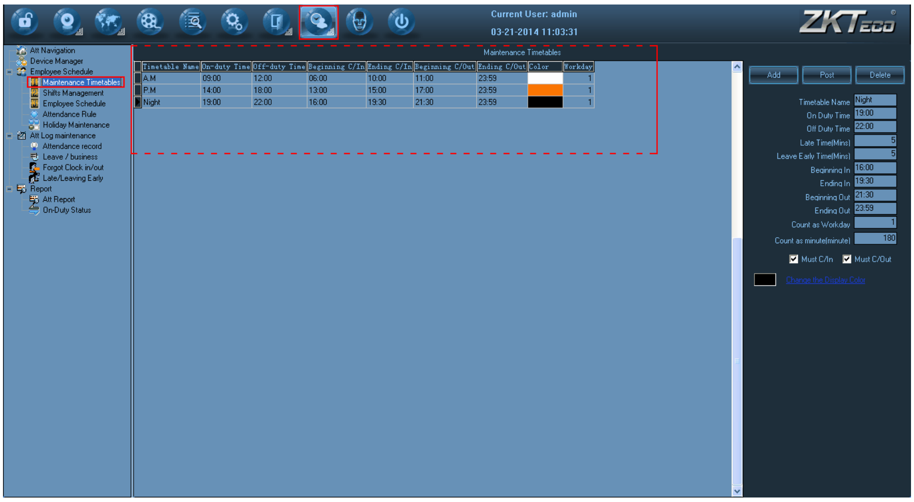
Before saving this **Temporary Shift**, be allowed to select the Time Period, press "" button to delete it, or press button to clear all Time Periods.

Click button to save temporary shift. If this temporary shift you add have been saved, press button to cancel temporary shifts during this period.

5. Shift schedule regularly change

There shift schedule regularly change that exist in most company, how to arrange the shift schedule regularly change, To handle various Shift schedule regularly change is a software's strong function.

Here ,illustrate change shift method with four shifts three times change a week, example ,there are A, B, C, D four shifts, working hours schedule are divided into **A.M** shift, **P.M** shift and **Night** shift three Timetable, the application beginning date is 1.

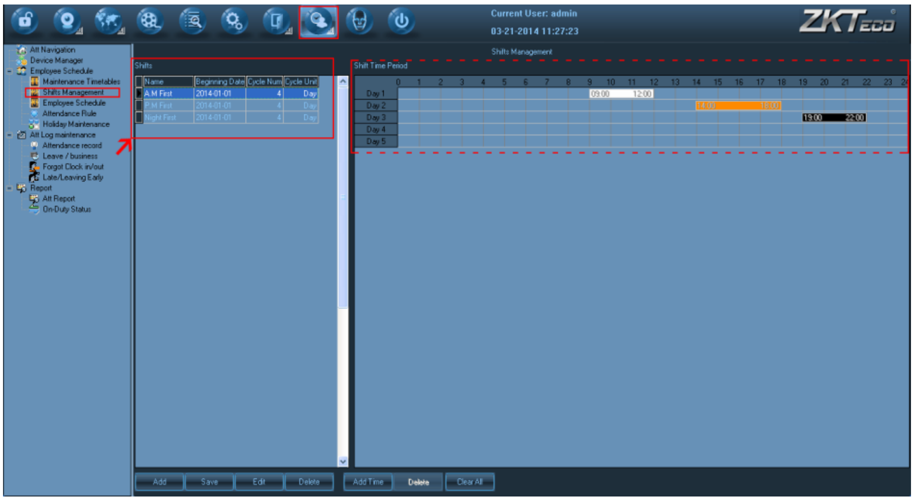


Employee working hours schedule list:

Shift / **Date**	**A.M shift**	**P.M shift**	**Night shift**	**Have rest**
1	A	B	C	D
2	D	A	B	C
3	C	D	A	B
4	B	C	D	A
5	A	B	C	D
6	D	A	B	C

7	C	D	A	B
8	B	C	D	A

From schedule list, the regular are fund, cycle of all employee work hour is four day. so, A, B, C, D four shifts' s four day working hours are divided into four shifts. Other shift follows the instruction.

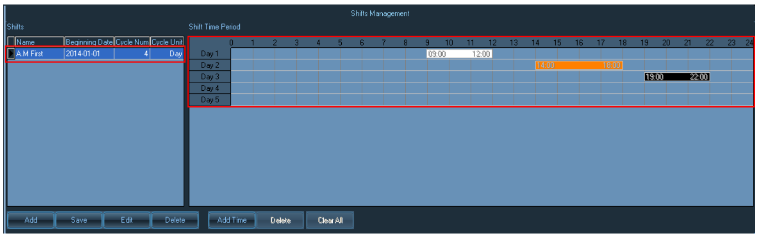


The specific procedure is as follows:

(1) Add three attendance timetables according to the working hours of three shifts. To add an attendance timetable, please see 4.8.2.1 Maintenance Timetable.

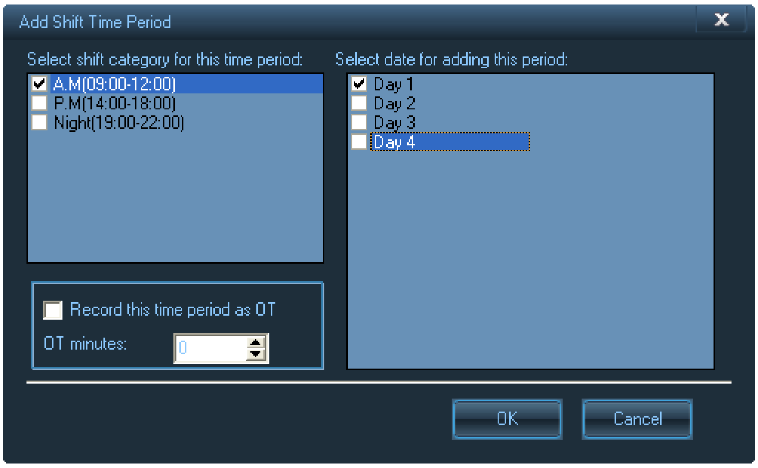
(2) In the **Shift Management** window, add three shifts (A.M First, P.M First, Night First). Add attendance timetables for these three shifts. To manage shifts, please see 4.8.2.2 Shifts Management.

✧ **A.M First**

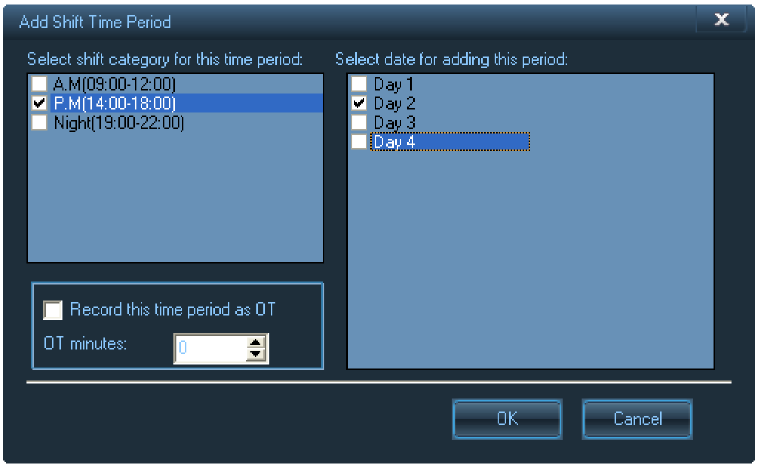


Step 1: Add a shift named "A.M First". Set its beginning date as 2014-01-01, its cycle number as 4 and its cycle unit as Day.

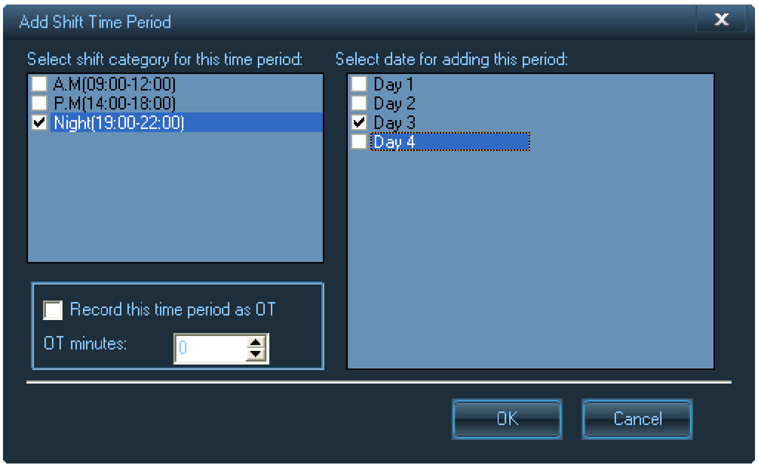
Step 2: Select this shift and click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "A.M." period for the **Day 1**, as shown in the following figure. Click **[OK]** to save the configuration.



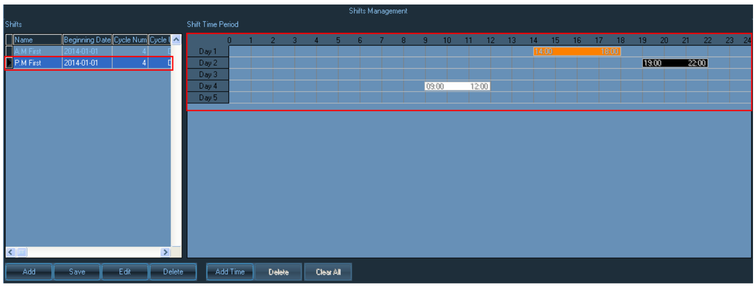
Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "P.M." period for the **Day 2**, as shown in the following figure. Click **[OK]** to save the configuration.



Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "Night" period for the **Day 3**, as shown in the following figure. Click **[OK]** to save the configuration.

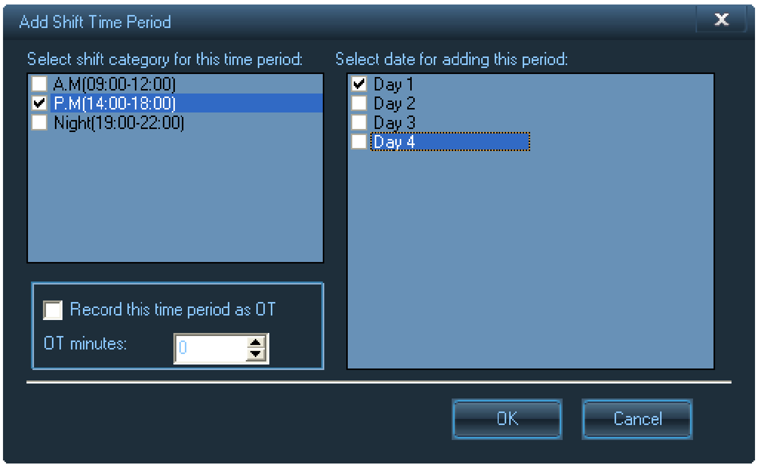


✧ **P.M First**

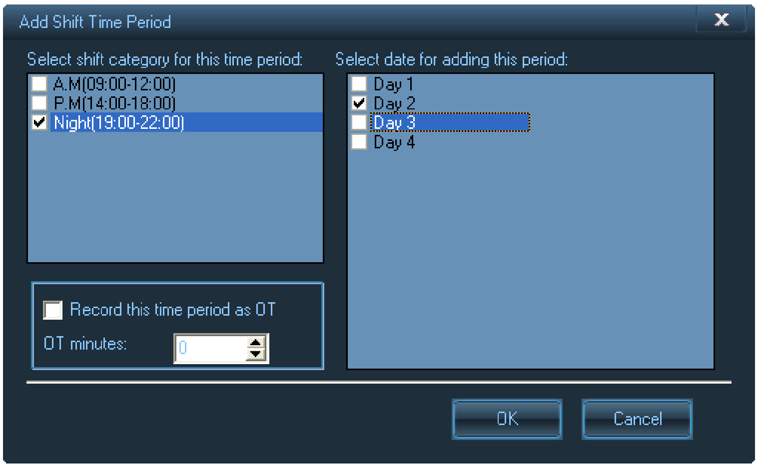


Step 1: Add a shift named "P.M First". Set its beginning date as 2014-01-01, its cycle number as 4 and its cycle unit as Day.

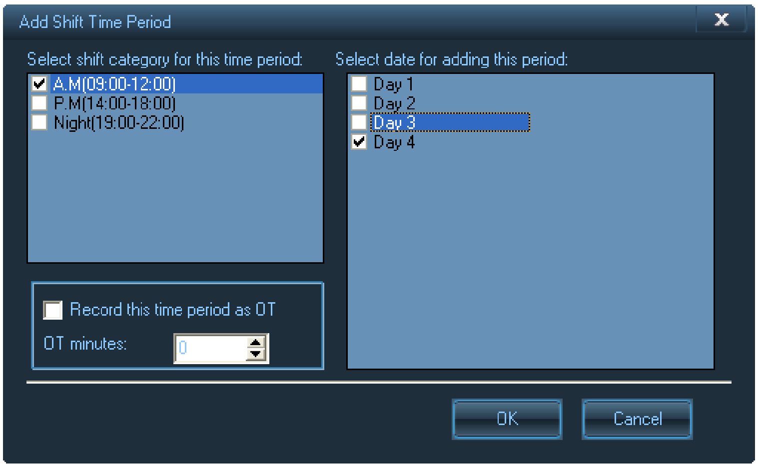
Step 2: **S**elect this shift and click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "P.M." period for the **Day 1**, as shown in the following figure. Click **[OK]** to save the configuration.



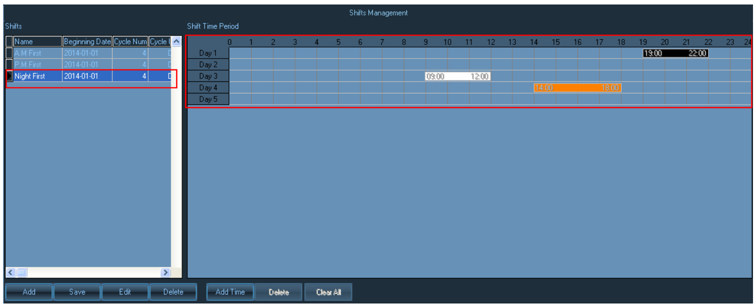
Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "Night" period for the **Day 2**, as shown in the following figure. Click **[OK]** to save the configuration.



Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "A.M." period for the **Day 4**, as shown in the following figure. Click **[OK]** to save the configuration.

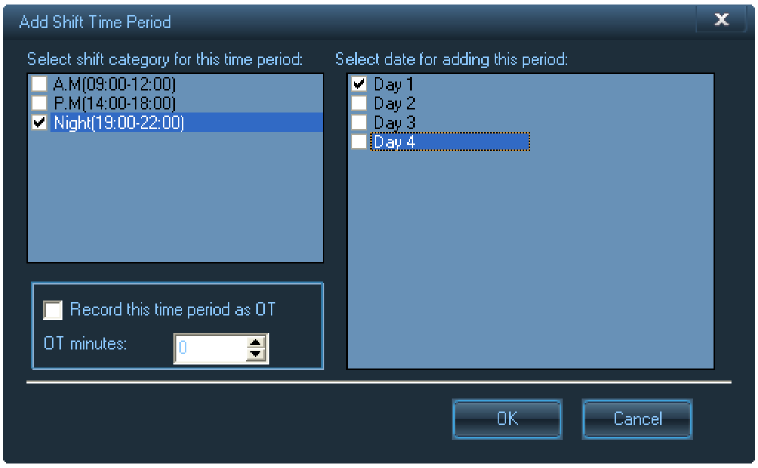


✧ **Night First**

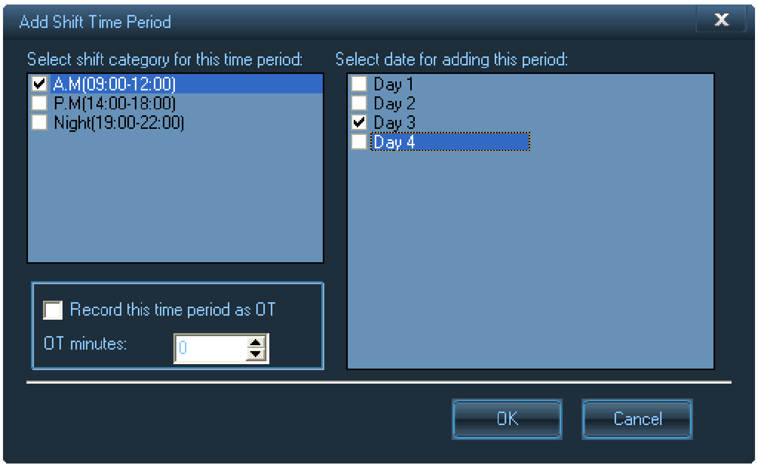


Step 1: Add a shift named "Night First". Set its beginning date as 2014-01-01, its cycle number as 4 and its cycle unit as Day.

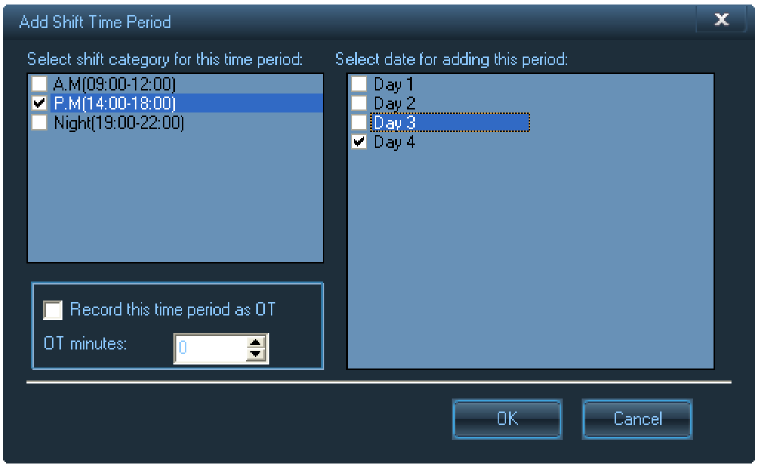
Step 2: Select this shift and click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "Night" period for the **Day 1**, as shown in the following figure. Click **[OK]** to save the configuration.



Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "A.M." period for the **Day 3**, as shown in the following figure. Click **[OK]** to save the configuration.



Click the **[Add Time]** button. In the **Add Shift Time Period** window, select the "P.M." period for the **Day 4**, as shown in the following figure. Click **[OK]** to save the configuration.



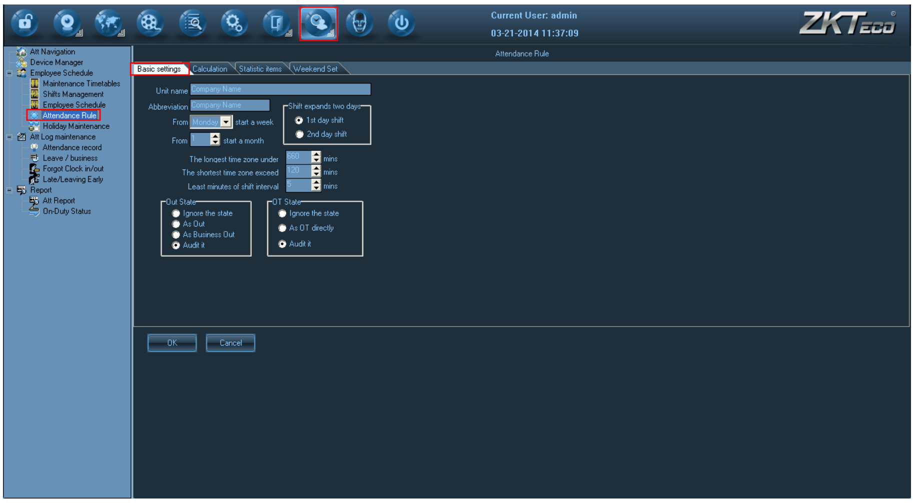
☺**Remarks:**

(1) After the Night shift, rest for a day, and then take the A.M. shift.

(2) After setting shifts, arrange shifts for the staff as required. To arrange shifts, please see 4.8.2.3 Employee Schedule.

4.8.2.4 Attendance Rule

Click **Attendance Function** icon  > **Attendance Rule** to enter the **Attendance Rule** interface:



This window consists of four tabs. View the **Basic settings** tab as default.

It is required to set the beginning day for each week or the beginning date for each month. Some companies calculate their attendance record from Sunday, and other from the 26th, after these setup, it is convenience for calculation to select time.

If a shift expires 0:00, it should be defined which workday this shift belong to.

How many minutes are the longest time zone no more than? How many minutes is the shortest time zone no fewer than?

In order to determine attendance status, verify record correctly, grant smart schedule demanded, so that the least minutes of shift is not litter than few minute. Otherwise the system will determine record as invalid

E.g. an interval of five minute, there is valid record at 8:10, so, among 8:10 between 8:15 records are invalid, it is valid record only after 8:15.

- **Out state**: There are four methods to be selected to handle leaving status

➢ **Ignore the state**: This status is ignored while attendance statistic to handle.

➢ **As Out**: This out status is signed Normal out.

➢ **As Business Out**: This status is sided on business out.

➢ **Audit it**: make verification for record by hand, examine employee whether go out.

- **OT state**: The over time consist of, counting over time, not counting over time, administrator allowing and count over time, three status.

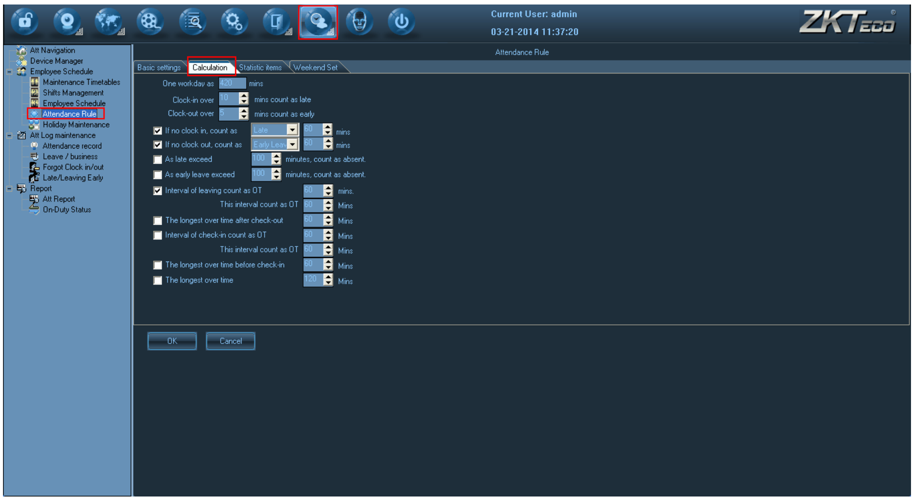
➢ **Ignore the state**: attendance statistic does not count over time.

➢ **As OT directly**: Over time does not need to be examined, count it directly.

➢ **Audit it**: Make to verification for record by hand, in order to examine whether employees have over time.

Examine operation (**Audit it**) is sub-item which attendance exception require and record list other exception require.

2. Click **Calculation** tab, show as below:



You need to set that the work hour account by minutes; this value should be the same with on-duty hour, because statistics result correct depends on this value.

In the step, how many minutes will be recorded as coming late after expire on-duty time, how many minute will be recorded as leaving early before near off-duty, the definition of time period must be the same with time period of the maintenance setup, otherwise the statistics result is Not correct.

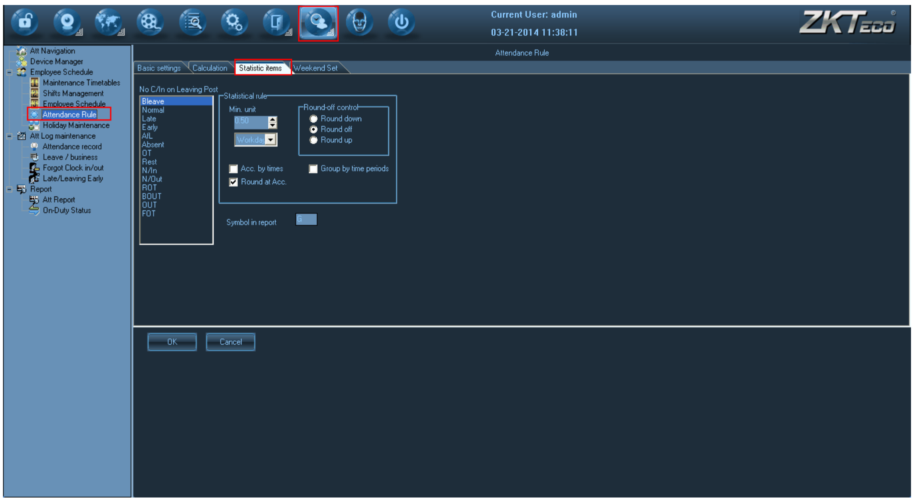
For the clock-in record, how many minute means coming late of neglect work, for the clock-out record, how many minute means leaving early or neglect work.

If you're coming late or leaving early is over to definite minutes, there will be regard as absent work

Can set overtime which are how many minutes it exceeds clock-off time, so this will be record overtime.

It can restrict the max Overtime (OT) hours and total OT hours before or after the on-duty time.

3. Click **Statistic items** tab, shown as below:



You can set statistical rules and symbols for employee leave on business, coming late and leaving early, etc, on the pagination label.

Freely over time (FOT): Over time work is not registered in schedule, employee attendance is regard as freely overtime.

Note: The system default setup only qualify with attendance situation which one day is divided into two Time Period, if one day is divided into more than three parts for attendance, please select all item and total them to ensure the accuracy of the calculation.

Group by time periods: This item will define whether attendance record will be distributed into their corresponding shift Time Period. E.g., select all items that are without clock-in item and group them, then you will get the total of time without clock-in and clock-out item.

Acc. by times: Only count the times, how many times are to display on the record list, No time record.

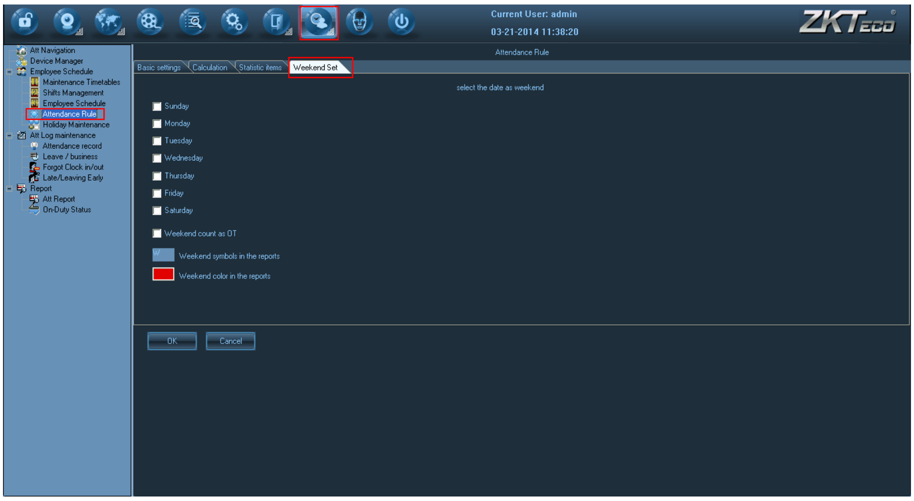
Round up: when the statistic data have point, the system will make after point figure to carry upward as 1. For stance, the min unit is 1-work hours, so that the calculation result of 1.1and 1.9-work hour will be record 2-work hour.

Round off: If the left values which after point figure excess 5, the value add 1, otherwise the left value is abandon.

Round Down: Abandon the value No matter how many it is.

E.g. min unit is 1 work hour, so that the calculation result's 1.1and 1.9 count as 1 work hours.

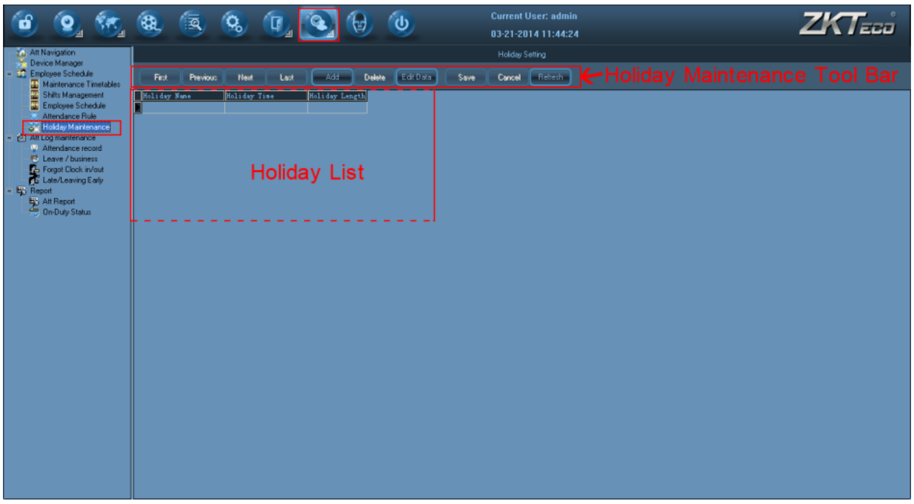
4. Click the **Weekend Set** tab, shown as below:



Set the date of weekend (for instance, the weekends of different countries are different) and the weekend display symbols and color in the reports according to actual requirements.

4.8.2.5 Holiday Maintenance

Click **Attendance Function** icon  > **Holiday Maintenance** to enter the **Holiday Maintenance** interface:

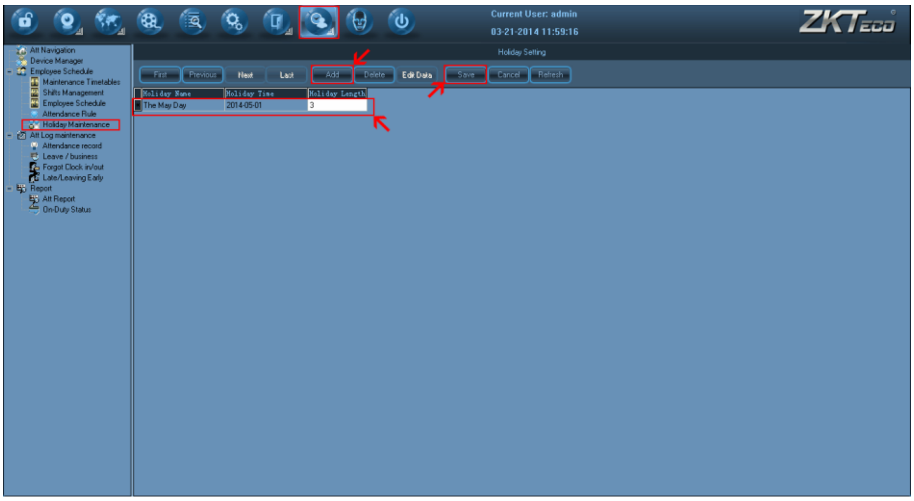


In the legal holiday, according to the related laws and regulations the employee will take the leave, the employee will be unable to Attendance for this period, in usually situation, if employee has not checked record, these employee will be regard as absent from work without an excuse by the system, moreover also the employee holiday working overtime will be unable to take effective in the computation, according to this kind of situation properly set management system.

This window is mainly divided into the Holiday List and tool column option of the Holiday List maintenance. May add, delete, and modify the Holiday List through maintenance tool column.

Add: Click 

button, a blank which is used to add information appears in the holiday list module. Input the **Holiday Name**, **Holiday Time**, **Holiday Length** and **TimeZoneID** into the corresponding blank. Shown as below:



Note: When input holiday time, the format you input is 01/01/14, after input, the default format 1/1/2014.

After setting all fields, click  button to save.

Delete: Click  button to delete the holiday information which does not need to use.

Edit: When need to adjust the holiday time which has been added, you can click  button to edit holiday fields. Then click  button to save the modified information.

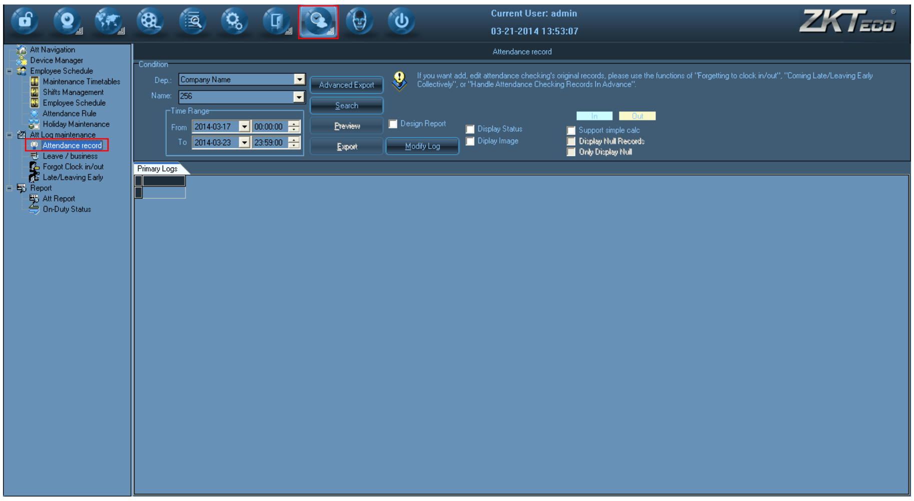
After adding the holiday list, while assign employee shift, the system cannot schedule these Timetable. Because assign employee shift record does not exist, therefore, set holiday period, in the Time Attendance report form, the system cannot count this period of time the Time Attendance. If in holiday period had the employee to carry on the Time Attendance registration, counted in the Time Attendance report form for this employee freely working overtime.

4.8.3 Att Log Maintenance

The **Att Log Maintenance** contents the following operations: **Attendance Record**, **Leave / Business**, **Forgot Clock In / Out** and **Late / Leaving Early**.

4.8.3.1 Attendance Record

Click **Attendance Function** icon  > **Attendance Record** to enter the **Attendance Record** interface:



This module is used to inquiry all employee attendance record which is downloads from the device, the computation of all attendance statistical bases on this record.

1. Search

(1) Only search attendance record

Department: Display all departments in this unit.

Employee: Display all employees in this unit; through drop-down box choice needs to inquire sub-item.

Time Range: Determine time scope that needs to inquire.

Search: Choose the department, employee, and determine the time range, then single-click 

button, the result in lower part the window to show the employee's of your choice attendance record in period of time will display in result box in low side of windows.

List has the department name, Name, No., Data/Time, Location ID, ID Number etc eight fields. The user also may choose the attendance statue, and the working code.

Display Statue: The attendance statue will display in list. (Clock-in / out, and so on.)

In order to distinguish the clocking in and clocking out, this module give clocking-in and clocking-out with the different displaying color.

Note: When device does not have the condition key, then attendance condition completely display as clock-in.

If needs to revise the displaying color for the clocking -in and the clocking out record , with the mouse single-click left-key on the color code block, pop up choice box of the color, choose the properly color, save it .

Support simple calc: After selecting a interface, be allowed to see that some software simply class process the original record in this interface, completely show employee's record by the day.

Display Null Records: Check this option. If the staff doesn't have the attendance record one day, there will also be a blank record in the list.

(2) Attendance for photo

If the software features is designed to support for attendance photos function, when search employee attendance checking records, employee's the attendance photos is available to see at the same time in View the attendance records interface.

If the options **Display Image** is taken by tick in the Application List click on an attendance record, if there is a the corresponding attendance photos, the system will be displayed.

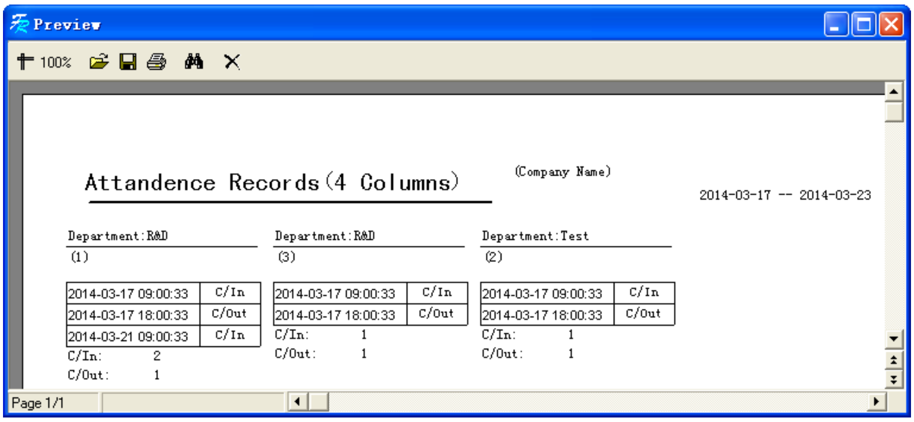
2. Preview and print

The module provide user with convenience to view the time &attendance report, print, save and so on. Operation step as following

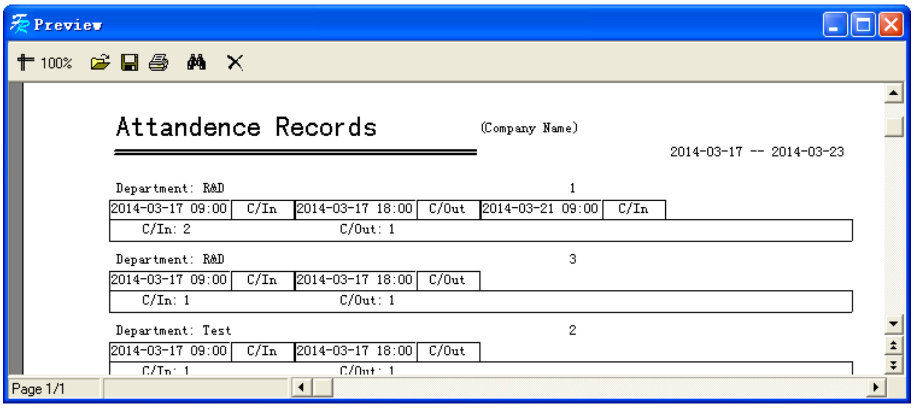
Click 

button to preview report in user's favor, shown as following:

(1) Attendence Records (4 Columns)



(2) Attendence Records



For printing report, only need to left click on the Printing button "" in report left side.

3. Export

(Please refer to 7.5 Export Data)

4. Advanced Export

This function is equipped with exporting data that has the strictly requirement, here will be allowed to export attendance record depending on the user setting. For detailed operation please see 7.6 Advanced Export.

5. Modify Log

If the use has revised the original Time Attendance record, the system provides a convenient way to inquiry the Time Attendance record which has been revised, and reverses the disoperation.

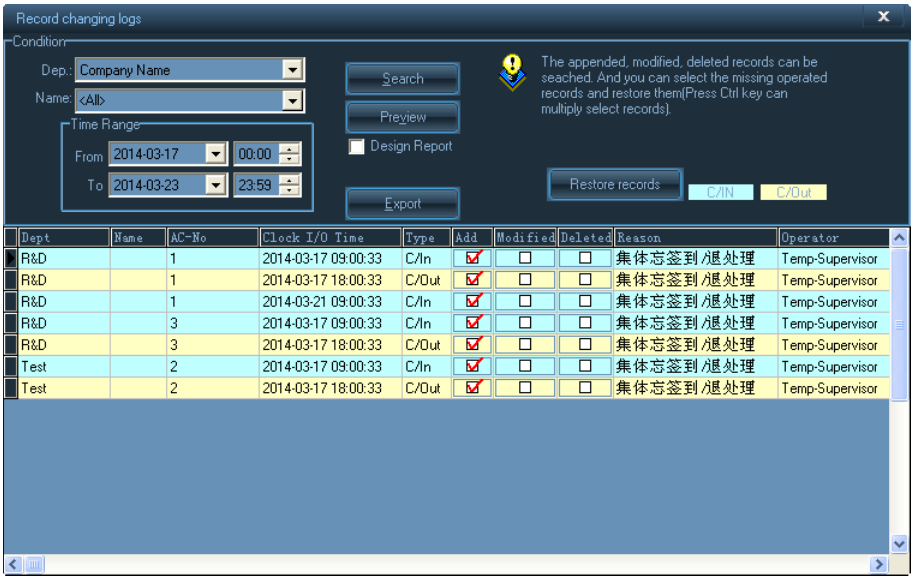
(1) Search

Click 

button, enter **Record changing Logs** window.

The search method and to search the record of user's attendance is similar. After choosing the department, the employee, determined the **Time Range**, single-click 

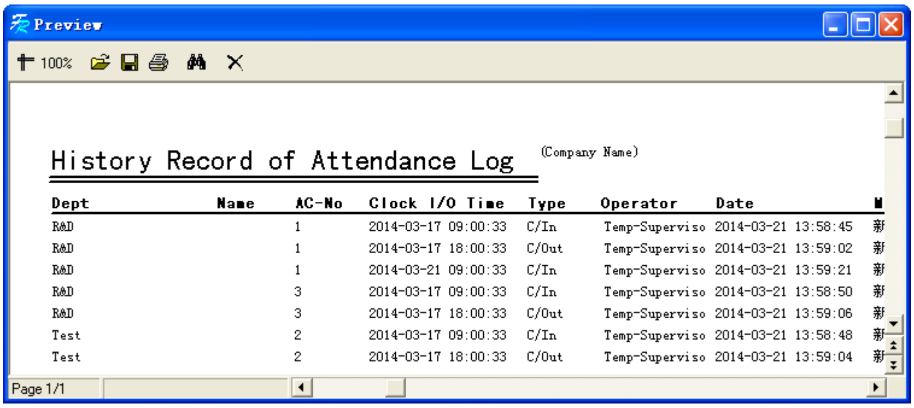
button, the result in lower part the window to show the employee of your choice the modified attendance record in period of time will display in result box in low side of windows.



(2) Preview

The content of list to preview and print is available. Click 

button to view the report style, shown as following:



(3) Export

Single-click 

button, may search result to export file, the operating procedure and the attendance record to export are completely same.

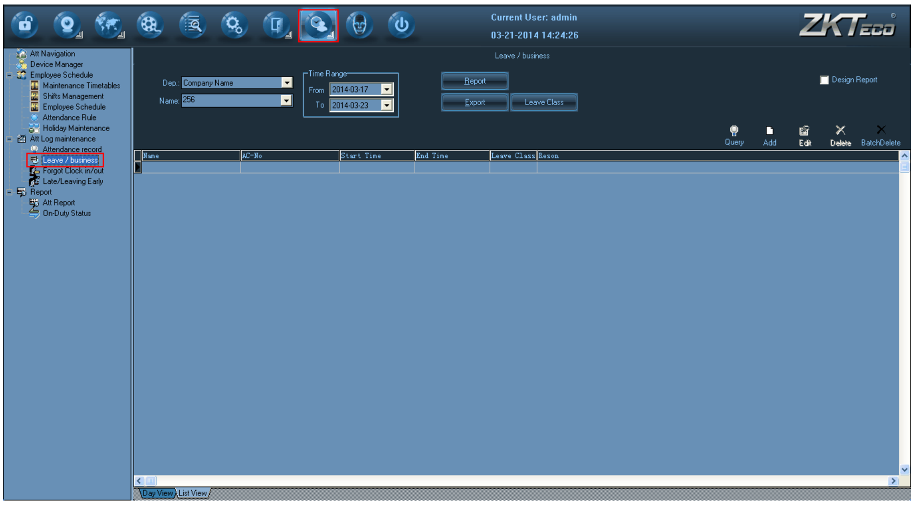
(4) Restore records

Sometimes, as a result of the disoperation or the actual situation change, user has to abolish modified to the Time Attendance record, by now through function to restore record the to realize. Only select the record list which must be restored, single-click the restore record to completes, then inquire it again, may get this record of attendance.

4.8.3.2 Leave/Business

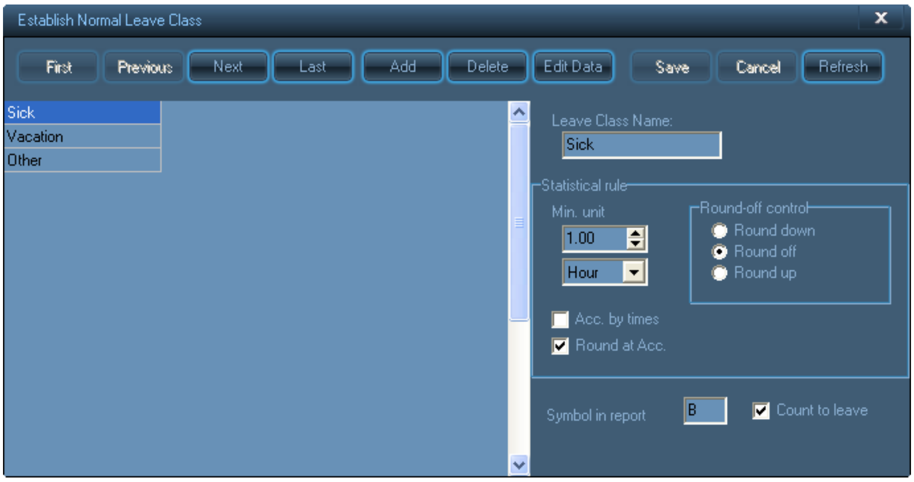
When an employee business trip or ask for leave are unable to attend Normal attendance, in order to ensure end statistic result is correct, it is required that utilize the function to set.

Click **Attendance Function** icon  > **Leave/business** to enter the **Leave/business** interface:



- **Leave Class Settings**

Click Leave Class button, the following **Establish Normal Leave Class** window will pop-up:



The system provides three kinds of ordinary default leave: **Sick**, **Vacation** and **Other**. They can be deleted and edited.

Add: Click Add button to add the new common kind. In the right side module may define **Leave Class Name**, **Statistical rule** and performance way of this leaves in the report and whether counts for asking for leave. After filling this blank, click Save button to save, or click Cancel button to abandon current operation.

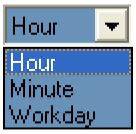
While this process, the information which needs to add as follows:

Leave Class Name: A name which takes for this kind of leave.

Statistical rule: The certain rule in the Time Attendance report for counting the leave.

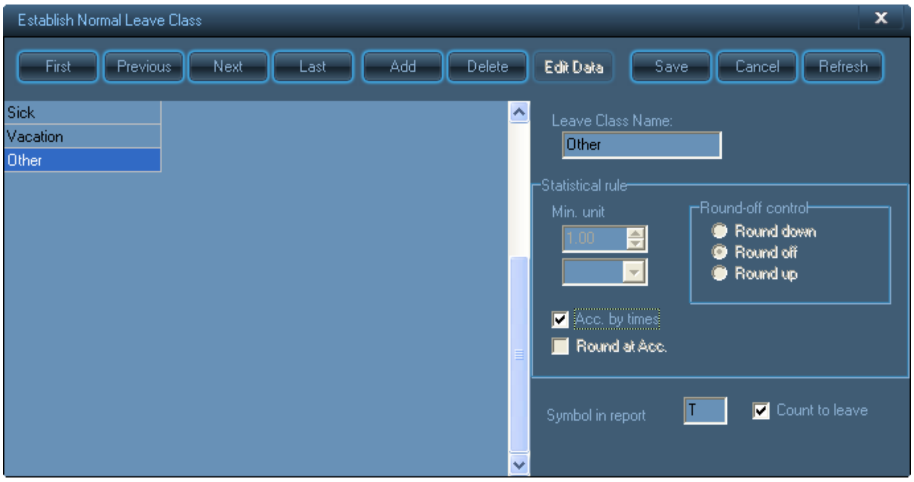
The kind of leave statistics rule: Min-unit, Round off control, Acc. By times, Round at Acc.

The min-unit is the smallest unit of measurement for leave. The common unit is Workday, Hour, Minute; there are several kinds of units of measurement in the working day. Shown as following figure.



The **Round-off control** refers to if the hour of the leaves is not integer in the attendance report while we calculate Time Attendance record , in order to get convenience in the computation of the Time Attendance statistics, provides with one computing mode. Round up, round off, Round down.

Acc. by times refers to this leaves statistics way in the Time Attendance report: The employee asks for leave in a period of time by the number of times which asking for leave takes the computing mode. If chooses this option, then the computation of the Time Attendance calculation does not comply with min-unit and the round control in the statistical rule. Shown as following figure:



Round at Acc is to accumulate all time of this project and converts it into the corresponding statistical unit, then depending on the smallest unit to setup the method for rounding off.

Symbol in report is the symbolic representation way of this leaves appears in the report while print report.

Count to leave refers whether set this leaves for asks for leave. Attention, if put tick in this option, then the date of asking for leave which is newly added will statistic as the asking for leave in the this leave computation of Time Attendance report.

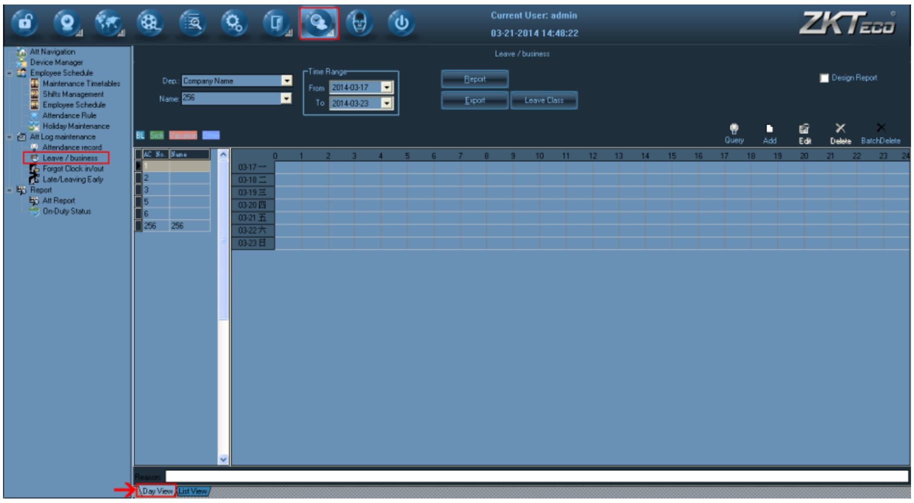
Deletion: Be allowed to delete a leaves. Selects a leave name which needs to be deleted, click "━" button to delete it.

Edit: Edit leaves. Select the leave name which needs to edit, click "▲" button; modify the leave in the right side frame.

- **Leave / Business Management**

The option page of **Employee Leaving on Business/Asking for leave** may be divided into two tabs that are the **Day View** and **List View**. The situation of **Employee Leaving on Business/Asking for leave** is able to be set in the **Day View** tab.

✧ Day View



Department: Through this drag-down box user can examine and to choose each department, the default department in the system is the main corporation.

Employee: Through this drag-down box user can examine and choose the employee from each department, default employee by the system is "Completely".

When view the lot of record, may set option for employee business trip employee/ ask for leave by a department.

Note: The employee is in "All" by default, is unable to add the employee business trip /asking for leave.

Employee list: The employees selected from the **Employee** option box are displayed in the employee list.

Leaves view: Through the view all leaves name which exist this system will be shown. Double-click name of leaves, may choose the color to distinguish the leaves.

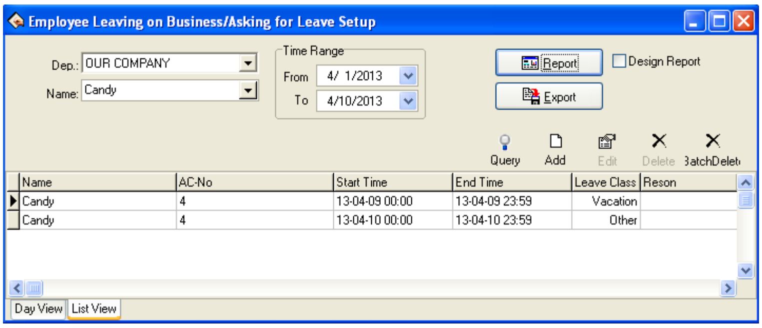
Time Range: Is same with the majority module in beginning and ending time, all is used to determine some Time Period, provide user with convenient to inquiry.

Report: Determined beginning and ending time, click this button to produce the employee business trip /asking for leave data sheet which display by the report.

Start Time	End Time	TimeLeng	Leave Class	Reson
Candy	4			
4/9/2013	4/9/2013 11:59:00 PM	23:59	Vacation	
4/10/2013	4/10/2013 11:59:00 PM	23:59	Other	

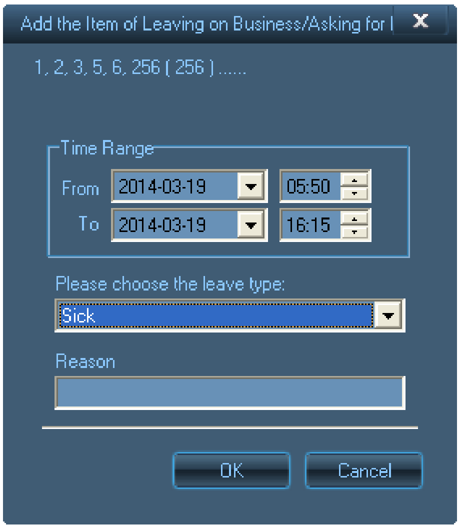
Export: Export the related record of all asking for leave in period of time into a folder by the text or the list, for detailed operation, please sees 7.5 Export Data.

Inquiry: This inquiry way is to demonstrate the record of all employees asking for leave by the list in period of time, this function link with "List" page label, when click this button, system will automatically jump to the page label, display the record of asking for leave by list. Shown as follow



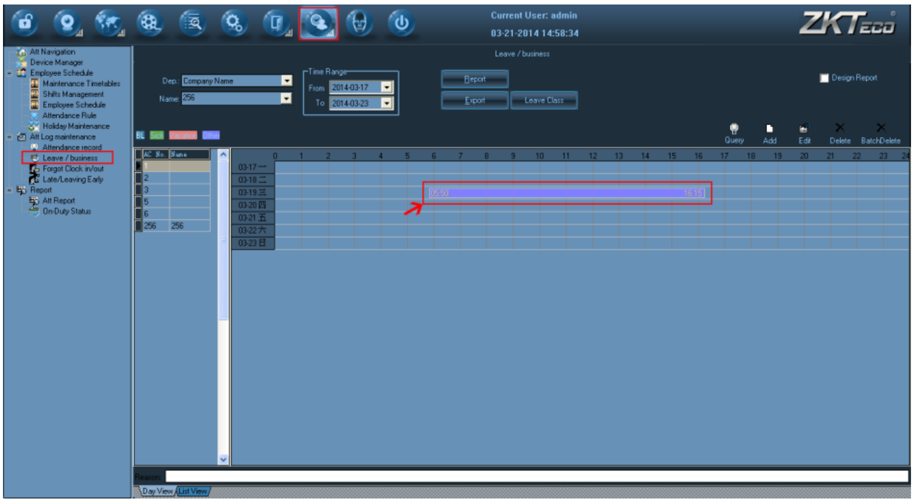
➢ **Add**: Add a record of business trip/ asking for leaves for an employee, there are two methods to add leaving on business or asking leave

(1) One way: After selecting departments, employee and date/time, left-click on the box of Select Set Asking-for-leave Time, and hold, drag to draw a time period bar, and then loosen the left button of the mouse, and the following dialog box of Select Leave Types will pop:

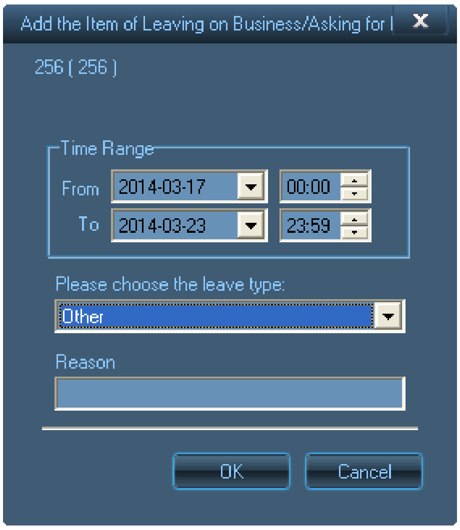


Choose leave type as **Other** and input reason in the **Reason** box. Click 

button to save, then the window showed as below:



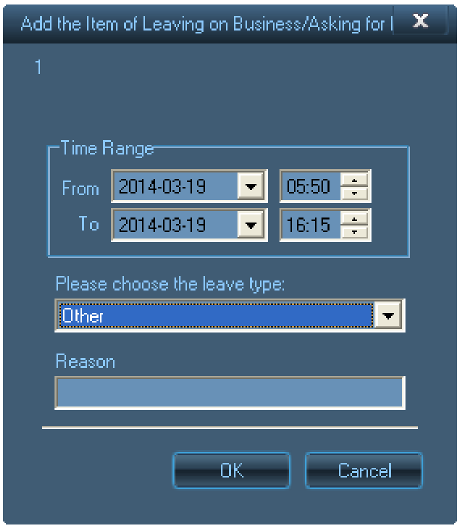
(2) Another Way: Select employee and click  button from tools column, determine **Time Range**, choose the **leave type**, and input reason in the **Reason** box. Click  button to save. Shown as below:



Edit: You can edit one asking-for leave time period on the window.

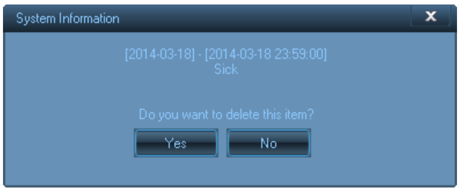
Method one: You may move the cursor of the mouse to one end of the asking-for-leave time bar, and when the cursor changes to "↔", right-click and hold, drag the mouse to edit asking-for-leave time, or move the cursor to the asking-for-leave bar, and when the cursor changes to"✥", click left key of mouse, hold and drag to move the asking-for-leave time as a whole.

Method two: If you want to modify accurate time, and when the cursor changes to✥, double-left-click or click  button on the setup window. The following dialog box wills popup:



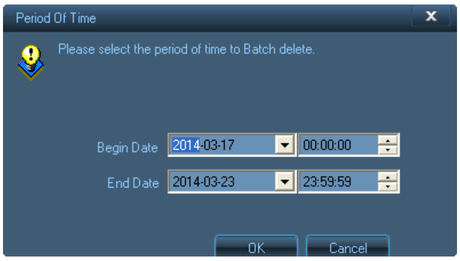
Modify as needed, then click  button to save settings.

Delete: If you want to delete one item setup, e.g. just click  button asking-for-leave will be deleted, Shown as following figure.

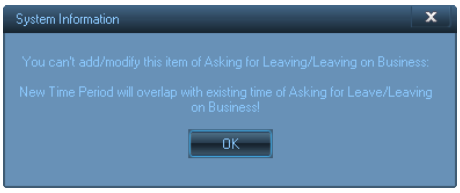


Click  button to delete this item, or click  button to abandon the operation; or you can left-click on the "Asking-for-leave" bar, which wants to cancel, then click **Delete** key on the keyboard to delete.

Batch deletion: Delete the leave records of employees in batches. Click this button, and the system displays a dialog box about the time range of batch deletion. Select a time range for batch deletion, and click  button.



When you add leaving on business time period, and if this time period overlap exited time period, the following caution box will appear

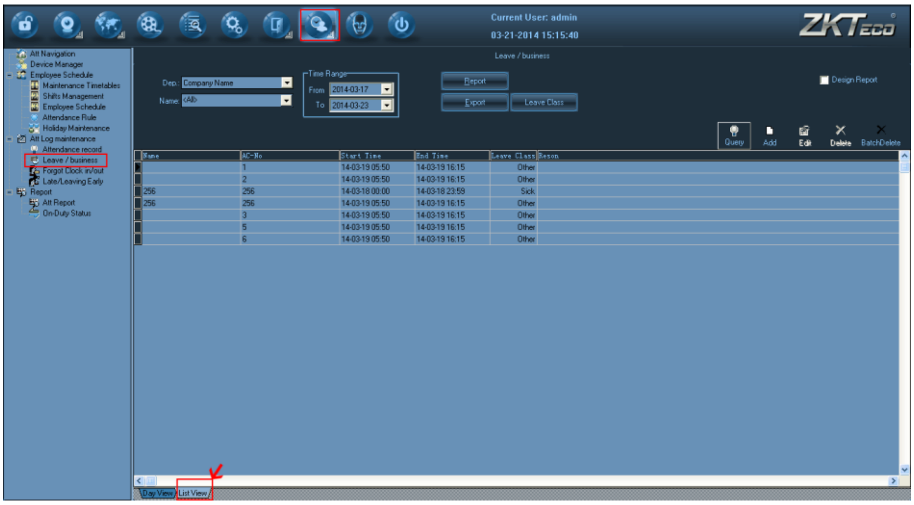


Click OK button, the operation is invalid.

After setting, the added asking for leave/ business trip is invalid currently. After you add the record of business trip/asking for leave successfully, then the shift detailed situation will belong to the exceptional case in the Time Attendance report, the situation of business trip /asking for leave will display in other unusual situations, default business trip/asking for leave take effective, system can directly compute the Time Attendance record , be allowed to business trip and asking for leave in here the verification, verifies for invalid, then does not count in the report has verified for is invalid the time which business trip/asks for leave.

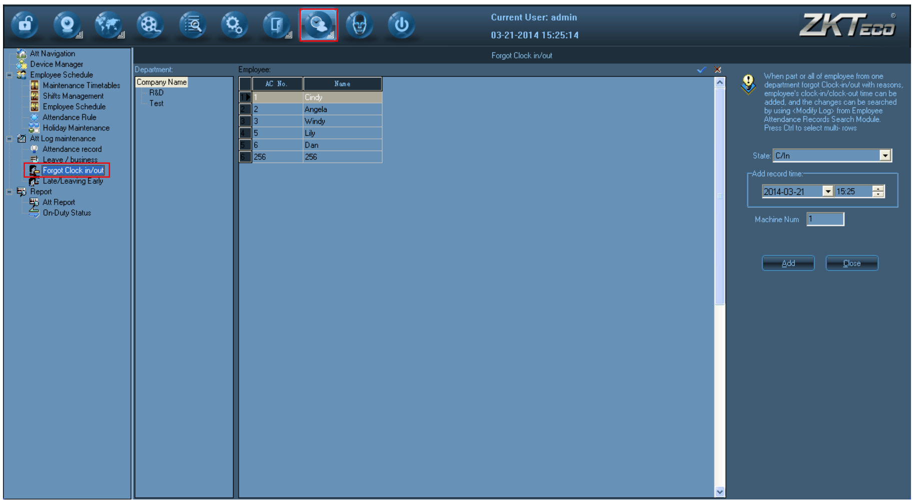
✧ **List View**

View the Leave/Business records by list, shown as the following figure:



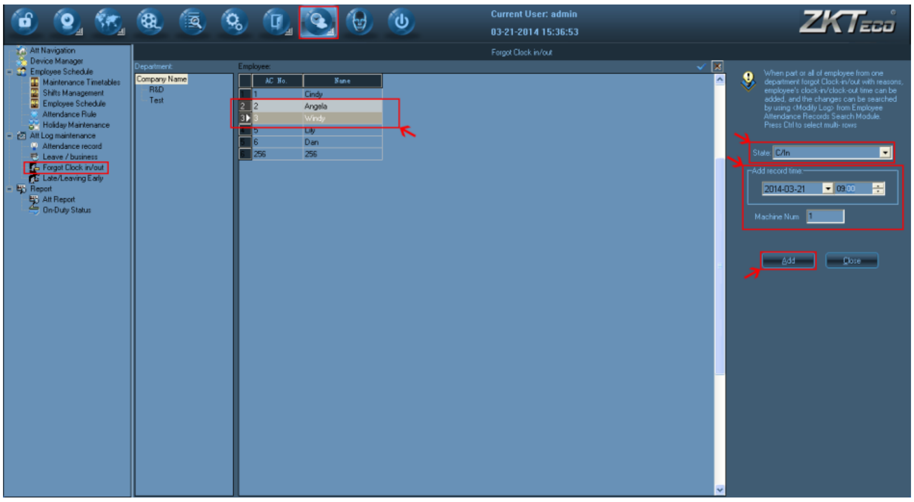
4.8.3.3 Forgot Clock In/Out

Click **Attendance Function** icon > **Forgot Clock In/Out** to enter the **Forgot Clock In/Out** interface:



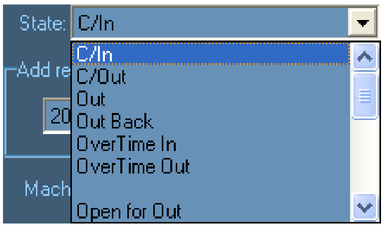
- **Handle Employee's Forgetting to Clock In**

If employee forgets to check in due for some cause, this function of **Forgot Clock In** can be used to add a clock-in record.

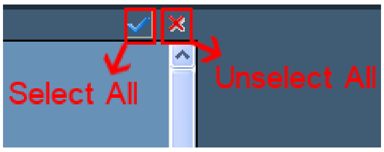


You first select department and employee, and choose the record style you add, Set record the date and time, click  button to add a new clock-in record

There are many select statuses of not only clock-in and clock-out, but also other option in select box. The type of choice box is allowed to choose the condition that not only has clocking in and clocking out, but also includes other options, if had to operate other types only to need to choose the different type, other types step of operation and handle the employee forget checking the sequence of operation to be same, interface as follows:



If need to handle all employees to forget clocking-in, click Select All button "", shown as following figure:



Press Unselect button "", the cursor to return to the previous condition before clicks Select All with mouse.

- **Handle Employee's Forgetting to Clock Out**

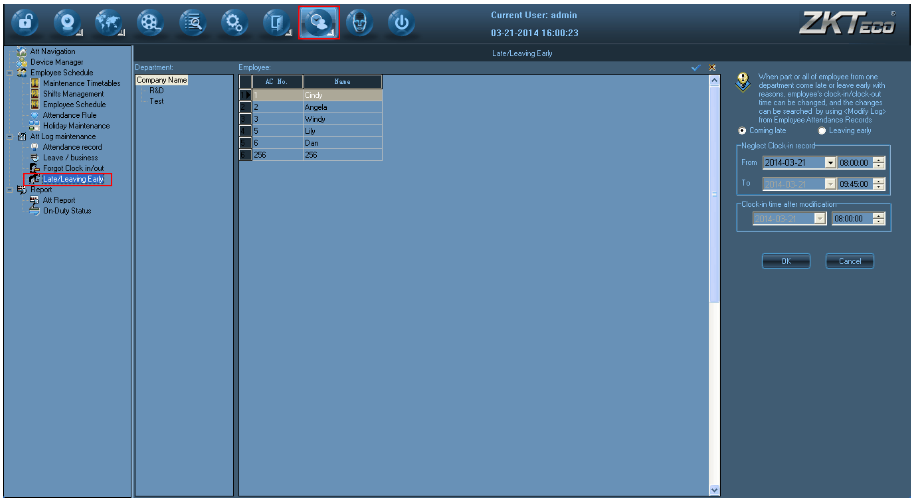
If one employee forgets to clock- out due to some special reasons, this function of handle employee forgetting to clock-out can be used to add a clock-out record, the operation process is the same with operation of to employee forgetting to clock-in.

4.8.3.4 Late/Leaving Early

- **Coming late collectively**

If part or the entire employees of one department come late, this function can be used to modify employee clock-in time.

Click **Attendance Function** icon > **Late/Leaving Early** to enter the **Late/Leaving Early** interface:



In the department option, select the department to which the employee who come late collectively belong and then click the employee of your choice in the employee option box, if you want to choose employee more than one, you can click the mouse while press **Ctrl** key. Click **Select All** button "" to select all employees, click **Unselect All** button "" to call off all selected employee.

Selected style consists of "**Coming late**" or "**Leaving early**", when you select, only lift-click on item you select.

Neglect clock-in record means to neglect selected employee all clock-in record during the time period is defined by the **From** time box and the **To** time box.

Clock-in time after modification means the time of the clock-in records to be adds in.

Click OK button to delete all neglect clock-in records or add clock-in record after modification, and to return the main menu.

Click Cancel to abandon this action and return main menu.

- **Leaving early collectively**

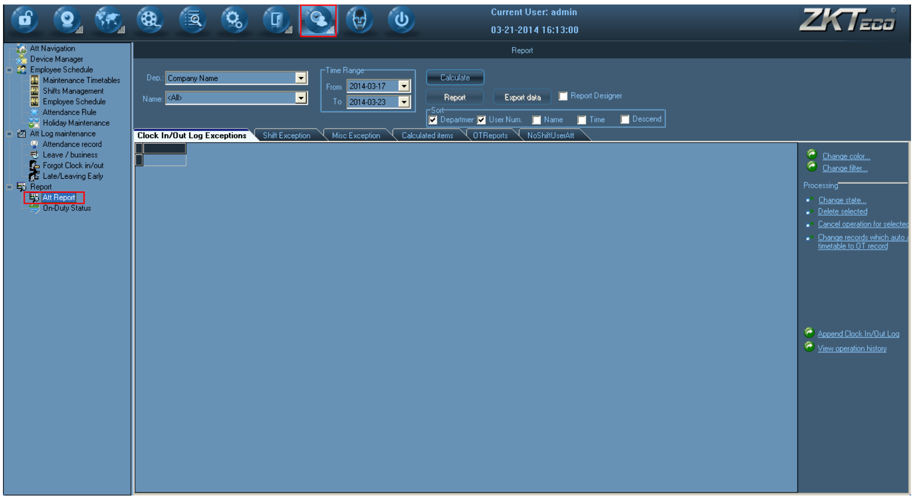
If part or all of the employee of one department leaving early with reason , this function can be used to modify employee clock-out time, the operation process is the same with to handle coming late collectively , it is only to select leaving early collectively.

4.8.4 Attendance Report

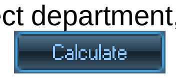
Check the employee’s Attendance Report and On-duty Status.

4.8.4.1 Att Report

Click **Attendance Function** icon  > **Att Report** to enter the **Att Report** interface:

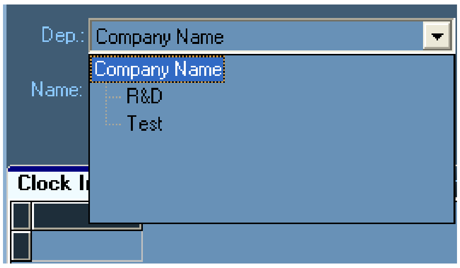


In attendance management, we usually need to search attendance calculation and to print various attendance records. Through the Attendance Calculating and Reports, to search and modify attendance exception and record list is available.

Select department, choose employee and determine the **Time Range** (beginning/ending time), and then click 

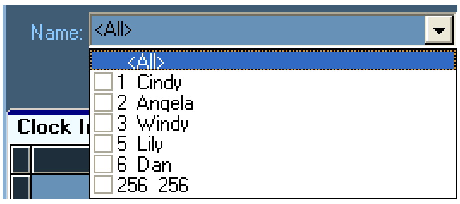
button to view the statistical record of time & attendance.

(A) View the department through drop-down box:

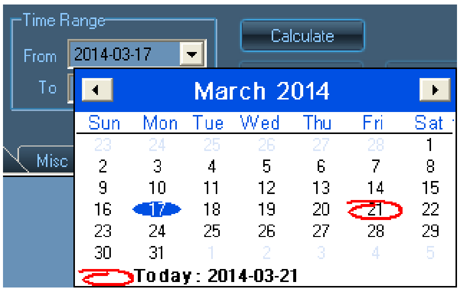


(B) Select employee

There are two ways to select employee, one way is to select employee through drop-down box:



(C) Determine the **Time Range**, show as below:

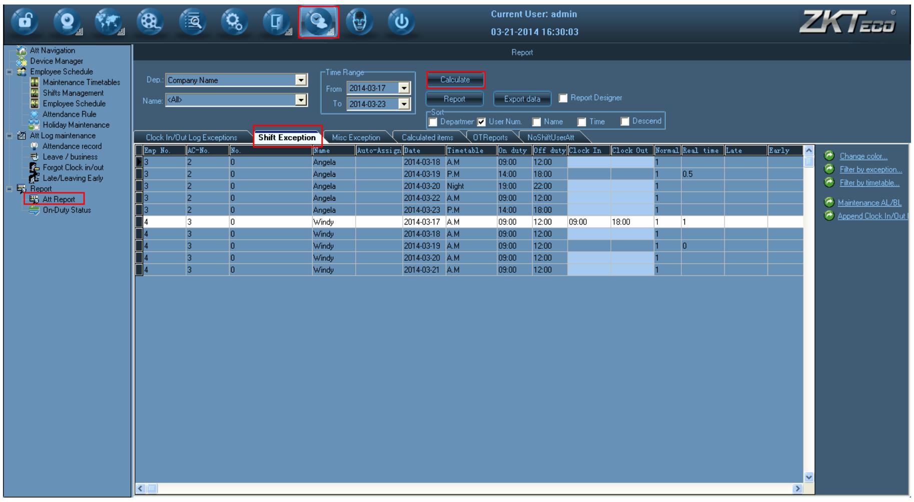


(D) After selecting, click 

button, the record of attendance is available.

- **Shift Exception Report**

The Shift Exception mainly view coming lately, leaves early, the absent no cause and the working overtime, working on/off hour and Clock-in/clock-out time, may relaxed carry on the computation of each month statistical, checkup and calculates whether has error. And handle employee business trip / forgetting the clocking out in this page setting, Shift Exception shown as following interface:



The defaults data in the shift exception list include the AC-No., Name, date, Auto-Assign, Timetable, On duty, Off duty, Clock In, Clock Out, Normal, Real Time, Late, Early, etc. If wants to display more, may right-click mouse then choose "**Columns**" item in the popup menu, after choose other rows that need to be show, put tick in front of the row that will be cancel.

➢ **Item explanation**

Timetable: The employee Clock-in/clocking-out time corresponding Timetable's name.

Late: The difference value between **On duty** and **Real Time**, if did not clock in, and the time when employee go to work without clocking-in record will be regard as coming x1 minute late in the **Attendance rule** asking, its item will be able to corresponding display. If has set option in the **Attendance rule**, the coming lately time is bigger than a x2 minute time will be regarded as absence from work, when x2 is smaller than x1, coming lately time will not display, record it as absenting from work on cause; When x2 is bigger than x1, coming lately time correspondingly show the x1 minute.

Early: The difference value between the **Off duty** and **Clock Out**, if did not clock out, and the time when employee gets off work without clocking-out record in the **Attendance rule** , the record time will be regard as leave early x1 minute, then the leaving early time correspondingly display. If has set option in the Time Attendance rule, the leaving early time is bigger than a x2 minute time will be regarded as absence from work, when x2 is smaller than x1, leaving early will not display, record it as absenting from work on cause; When x2 is bigger than x1, the leaving early time correspondingly show the x1 minute.

OT Time: In the Attendance rule option, put a tick in front of item that clocking–out after getting off work xx minute will recorded as OT Time, then difference value between after getting off work xx minute to clock out time in clocking-out record and the working off hour record is the OT Time. If the shift has a period of time to count as working overtime (in the shift schedule management while add shift Time period, just put a tick in front of this Timetable, and record it as OT Time), also setup has counted a working overtime minute; total of working overtime minute is the OT Time.

ATT_Time: The difference value between **Clock In** and **Clock Out**.

Work Time: The difference value between **On duty** and **Off duty**, if there are coming lately or leaving early time, use the difference value to reduce the coming lately or leaving early time.

Exception: Record exception; Sick leave, business trip and so on. For other item, please refer to item explanation about Time Attendance statistical table

➢ **Tool column**

Change color: In order to better distinguish each kind of displaying statue; be able to change various statues appearance.

Filter by Exception: Single-click the here, the choice menu appears, which exception may be selected to demonstrate, which didn't display, Put the tick in the item which is selected.

Filter by Timetable: Single-click the here, the choice menu appears, may choose the Timetable will display, which Timetable is in exception, when there is tick "✔" in front of the Timetable name, that the express this Timetable is selected, and in exception.

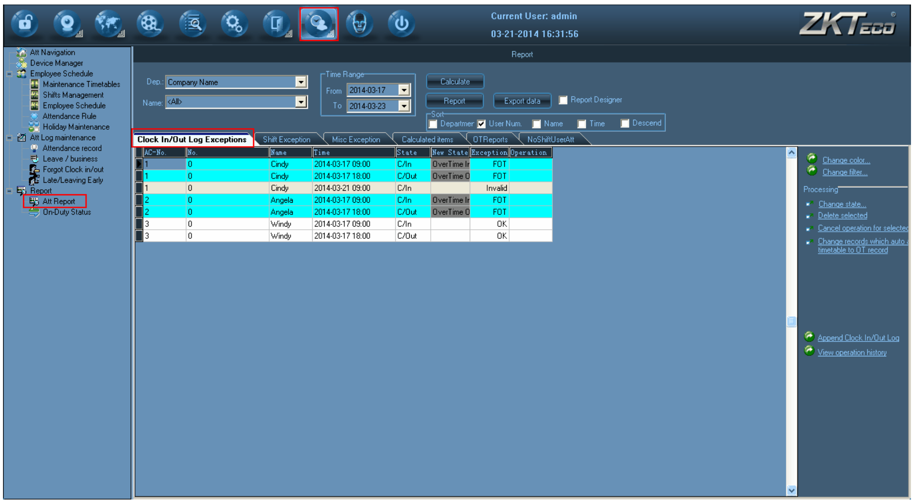
Maintanance AL/BL: The operations of **Employee Leaving on Business/Asking for Leave** are same with handle Attendance.

● **Clock In/Out Log Exceptions Report**

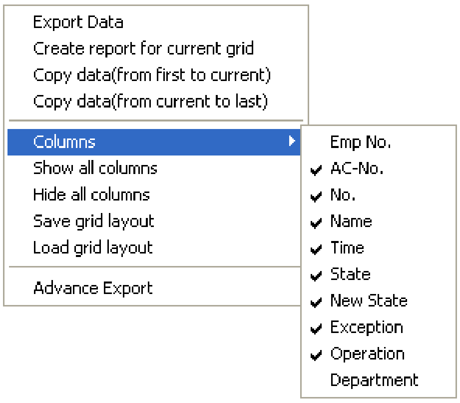
The page of **Clock In/Out Log Exceptions** is to examine original record statue which download from the equipment and revise to the Time Attendance record states.

➢ **View the Attendance record**

After searching and calculating, chooses the **Clock In/Out Log Exceptions** tab, shown as the following figure:



In the **Clock In/Out Log Exceptions** the default data row includes the **Name**, the AC No., Attendance time (**Time**), the working statue (**State**), the correction statue (**New State)**, the **Exception** and **Operates** 7 items, if wants to display more, may right- click on the list, then click "**Columns**" sub-item in the dropdown list, put a tick in front of the row that needs to be demonstrated. Shown as following figure:



After change the setting of **Columns** displaying, save the columns setting, later directly write down the columns setting is available.

Employee serial number "Emp No.": In employee maintained option, every time add employees, the system will assign a number to the employee.

AC-No.: number which manager assigns to the employee.

Checking time "Time": The employee clock in or clock out by fingerprint the time.

Checking Status "State": there are six kinds of status: check-in, check-out, overtime check-in, the working overtime check-out, business trip, Business returns.

Note: If the device has the status option, the checking status will show corresponding statue in the Time Attendance record; If the device does not have the statue option, all show as "checking-in" in attendance this row, the system depend on the Time Period setting in management program to judge the Time Attendance statue, display in the correction status.

Correction Statue (**New Statue**): When the Time Attendance machine has option setting, this rank is in empty; Otherwise, in the correction statue system depend on the assigned employee the shift Timetable and the fingerprint verification time to judge whether the employee is in clock In, clock Out, late or early, system computation of the statistics by this status.

Exception: There are 8 kinds of situations: The normal record, the invalid record, the duplicate record, the statue is wrong, frees working overtime, working overtime, business trip, the auto-assign employee shift.

Invalid record: the clocking-in, clocking-out beyond shift Time Period the time scope the record completely regard as invalid. The invalid record will be regarded as this record does not exist; during Time Attendance statistician it will not to be count.

Repetition of record: when the Time Period of the Time Attendance record is smaller than the effective interval of "Time Attendance rule", the record regard as repetition of record.

Free overtime: The employee has checking-in/out record within the Time Period which has not been assigned to employee, and maintains this employee's Time Attendance setting page in the employee "to count working overtime" the item to select.

Overtime: there is a statue setting in the device, the Time Attendance record the attendance statue as the overtime-in, the overtime-out, the demonstration is working overtime in the abnormal state column.

Business trip: there is a statue setting in the device, the Time Attendance record the attendance statue as business trip, the demonstration is approval absence in the abnormal state column.

Auto-assign employee shift: Employee's checking-in/out record does not exist in the Time Period that has been normally assigned to the employee, but the record is in the employee auto-assigned the Time Period, then this record show as auto-assign abnormal state column.

Corresponding Time period: Is one kind of sign in the software interior (do not display it, has nothing to do with user operation)

Operation: show the operation for record of your choice.

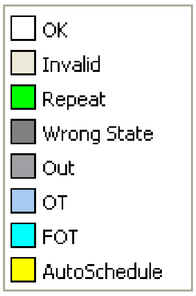
Department: The employee is at department.

- **Revises the Attendance record**

Choose the corresponding operation to revise the Attendance record with tool column in the right side page.

Tool column

Change color: May change each kind of condition that express color, single-click the here the following interface appear

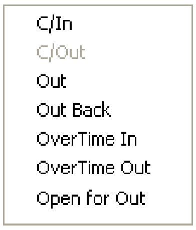


Single-click color block in front of each kind of condition may choose the color which you needs in this interface, after selecting, Be sure to single-click "**OK**" button to save.

Change filters condition: Definite that status record in displaying box, click "**Change filter**" the following window will appear:

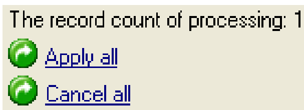
Make a check it to show it selected status, appear on the display box, utilize clicking "✔" to switch status between selected and unselected.

Change status: Able to make a present status of selected record to become a select status, after selected a record, click "**Change state**" the window is following:



Because Attendance statue all is clock/in record, therefore this statue is impossible to use, may single-click other statue to select.

Delete selected: May sign the attendance record of you select as deletion condition, after using this function, in the tool column can add two items, show as below:



Apply all: After selected this item, all setting operation which display in operation column is valid before this;

Cancel all: After select this item, all setting operation is invalid before this, all operation will disappear in operation column.

Cancel operation for selected: Only cancel current record operation.

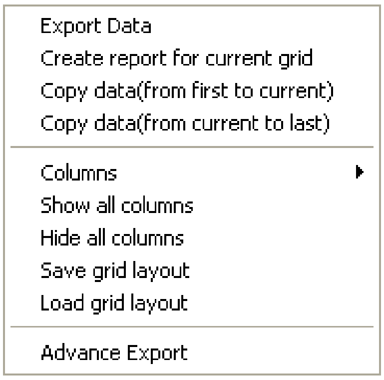
Change records which auto assigned timetable to OT record: Make system smart schedule record to overtime.

Append Clock in/Out Log: The process is the same as Attendance handling operation.

View operation history: The process is the same as Attendance Record operation of s**earch/print**.

➢ **Right key menu**

On the **Attendance Record** window, right-click the mouse, the following menu will appear:



Export data: Is same as "**Export data**" button function in the interface, for detail please see **3.6 Export Data**.

Create report current grid: Is same as "**Report**" to establish current data record list function, make searched attendance record as record list to export. Able to list prints to export, save, and search for in list, etc. operation.

Copy Data (from first to current): Searched record result copy directly, form duplicating to current position, and can patch in Excel list directly

Copy Data (**from current to last**): Searched record result copy from current copying position to ending, and can patch to Excel list directly.

Column "Data row": Select item name on the searching window appearing, click pop up menu is following.

Show all Columns: All item name of data row display on search window.

Hide all columns: All item name of data row except surname and name hide on the search window, only show surname and name.

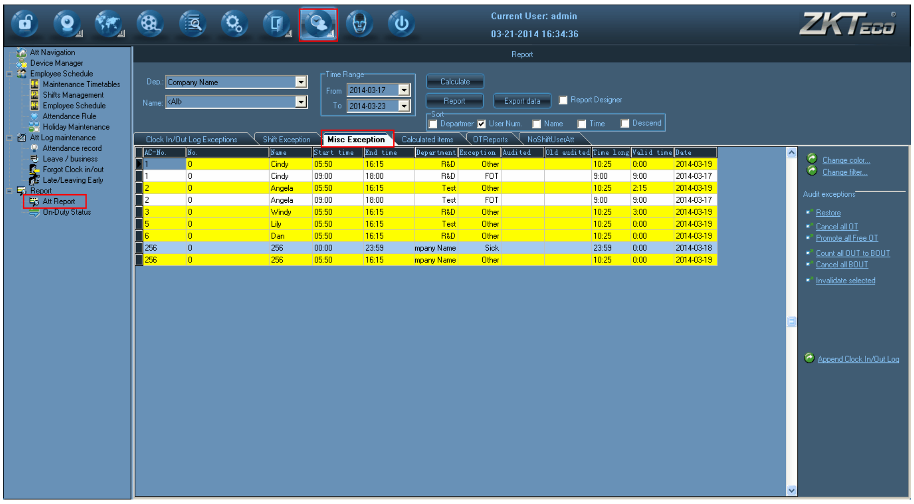
Save grid layout: The item name on which the search window appears can be saved, load data row setting to use.

Load grid layout: According to store data row to show item.

Advance Export: Export the list as file. See **3.7 Advance Export**.

- **Misc Exception Report**

Misc exception is used to verify and appraise employee hour of overtime and business trip, default leave, sick leave, home leave are effective; overtime, free overtime, business trip, approval absence, are invalid by default, it need a calmer appraisal of whether effectively, writes down in the statistical report. Misc exception interface show as follow:



In **Misc Exception shift,** the default data include department, name, AC-No., start time, end time, exception, Audited, Old audited, Time long, Valid time, Date. If you want to show much more item, just right-click "Columns" item of your choice, if you want to show anther row, put a tick in front of the row you have selected.

Start time: Start time for abnormal statue.

End time: End time for abnormal statue.

Exception: There are 8 kinds of statue: free overtime work, overtime work, business trip, approval absence, sick leave, leave, home leave.

Audited: After the verification, show that overtime work or is in invalid statue.

Old audited: Unaudited statue.

Time long: The difference value between end time and start time.

Assigned shift work day: The exception situation across the working day which has assigned shift.

- **Tool column**

If the Attendance rule limit the business trip and the overtime work statue must through verification, then verified statue column is empty, if has regulated the statue of verification, the corresponding statue column will appear in the verified column.

Restore: This operation does not take effective unless the record has been audited, return record statue to initial verification state. After the return to original status, be sure to re-inquire and compute.

Cancel all OT: Exception list shown that the overtime work record all regard as invalid record.

Promote all Free OT: The system regard personnel's, who has not assigned to Timetable, Time Attendance record (who must own clocking-in/clocking-out record simultaneously) as free OT , if this item in choice, systems judge all free overtime work will be showed as overtime work.

Count all OUT to BOUT: All employees' out record regard as business.

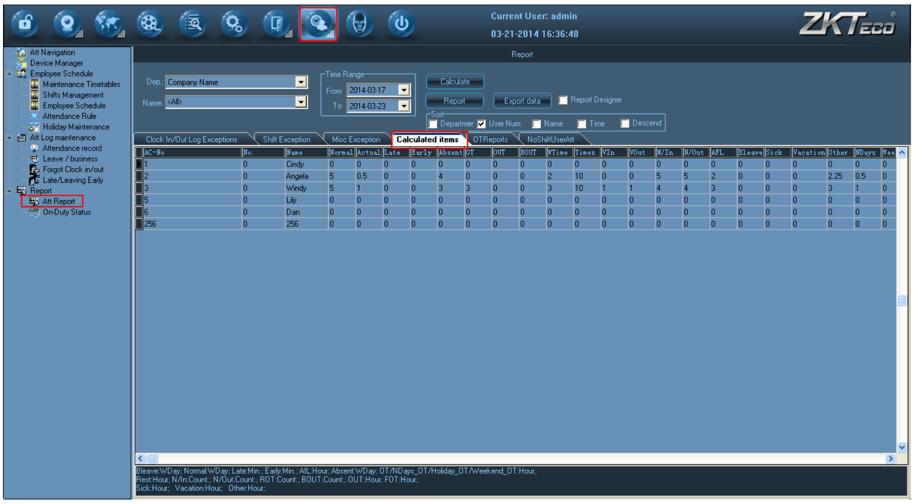
Cancel all BOUT: All the business trip record will be canceled; this record will be generally egresses or according to the actual situation handle it.

Invalidate selected: Change the record statue of your choice to be invalid.

On the displaying window of Attendance Calculation, right-click to be possible to operate is same as the Clock In/Out Log Exceptions.

- **Calculated items Report**

The calculated items tab is the page which commonly used, count all items in the employee assigned time to produce report, is easy to examine and settlement.



In the Calculated items pagination the default data include name, AC-No., late, early, sick leave, etc. If you want to show much more, may right click on "**Columns**" the option in the table, show other rows of your choice, there is a tick in front of the row.

Should arrive (**Normal**): Depending on the employee shift, count the employee's working day which should go to work between the start and end time. The defaults unit is the working day, may change the statistical rule in the "Normal" of the Time Attendance rule calculation page.

Actual arrive (**Actual**): According to The Clocking in/Clocking-out record , statistic the employee working day which actually goes to work between the start and end time. The Defaults unit is the working day, able to change the statistical rule in the "Normal" of the Attendance rule calculation page.

Coming lately (Late):

(1) According to the "Coming lately "statistical rule in the Time Attendance rule in and the shift manages to record is late x time which in the time establishes to calculate, after namely if employee's registration time surpasses x time to record for is late, is late when the length is the registration time with the work hours bad value.

(2) Non- registration recording, according to Time Attendance in the rule Time Attendance computation to go to work, the non-registration recording time mark to be late xx minute; Result which obtains in the beginning and end time all situations statistics. The default unit is the minute, able to change the statistical rule the Time Attendance rule computation project page "Late".

Leaves early (Early):

(1) According to the statistical rule in the Time Attendance "leaves early" rule and the time setting in the Shift management record the leaves early time, after namely if employee's clock-out advance x hours to record as leaves early, hours of leaves early is difference value between the Clock-out time and the work off time.

(2) If there is not the clocking-out record, according to the Time Attendance rule, in the computation of attendance statistical, when employee get off work without the clocking-out record the time regard as leave early xx minute.

Obtain result from all situations to statistic among the start and end time. The default unit is the minute, able to change it under the "Leaves early" statistical rule in the computation of Time Attendance rule page.

Absence without an excuse (Absent):

(1) According to "Absence without an excuse" statistical rule under Time Attendance rule, if employee does not have the checking-in/out record, who's attendance record regard as absence without an excuse.

(2) According to the Time Attendance rule, in the computation of Time Attendance time , hours of late is bigger than xx minute, employee record as absence without an excuse, hours of leaves early is bigger than xx minute, employee-record as absence without an excuse.

Obtain result from all statistical situations between the start and end time.

The default unit is the working day, can not change it.

Overtime Work (OT):

(1) According to the "working overtime" statistical rule of Time Attendance rule, as well as the computation of the Time Attendance rule, employee gets off work after x minute, whose work is recorded as overtime work, obtain hours of overtime from the accumulation.

(2) In the Shift management there is a Time Period which directly to be recorded as the overtime work, idea the minutes of overtime work is the hours of overtime.

(3) According to the option situation in the Time Attendance setting/maintenance, the employee's work record as overtime work, in other exception situation list the overtime work and the free overtime is verified as effective work to statistic; obtains two results among the start and end time all accumulation situations. The default unit is the hour, able to make a change under the "Overtime work" statistical rule in the computation of Time Attendance rule page.

Egresses (OUT): According to "Egress" the statistical rule in the Attendance rule, as well as the approval absence is effective in other exception situation list; carry on the computation of the statistics.

Obtain result from all statistical situations in the start and end time. The default unit is the hour, able to change it under the "Egress" statistical rule in the computation of Time Attendance rule page.

Business Trip (BOUT): According to "Business trip" the statistical rule of it he Time Attendance rule, as well as the approval absence is effective in other exception situation list; carry on the computation of the statistics.

Obtain result from all statistical situations in the start and end time. The default unit is the hour, able to change it under the "Business Trip" statistical rule in the computation of Time Attendance rule page.

Hours of work (WTime): The computation of attendance depends on the time of employee clock-in/out. Obtains the result from completely accumulation between the start and end time.

Should checking-in times (Times): According to the Timetable, total of the Clocking-in/out times between the time range.

Clock/In (VIn): Actual clock/in times between the time range.

Clock/Out (VOut): Actual clock/out times between the time range.

No clock/in (N/In): No clock/in times during the time range.

No clock-out (N/Out): No clock/out times during the time range.

Asking for leave (AFL): Accumulate all kinds of vacation, and statistics result. The default unit is hour, able to change it under the "Leave setting" statistical rule in the computation of Attendance rule page.

Approval Absence (BLeave): According to "Approval absence" statistical rule in the Attendance rule, as well as the approval absence take effective in other exception situation list, carry on the computation of the statistics. Obtain result from all statistical situations between the start and end time. The default unit is the working day, able to change it under the "Approval absence" statistical rule in the computation of Attendance rule page.

Sick leave (Sick): According to the sick leave statistical rule under kind of Leave setting, as well as the sick leave take effective in other exception situation list by verification, carry on the computation of the statistics. Obtain result all from statistical situations between the start and end time, the default unit is the hour, be able to changes the "Sick leave" statistical rule under leaves setting.

Affair: According to the leave statistical rule under leaves setting, as well as for the leave is effective in other exception situation list to by the leave verification, carry on the computation of the statistics. Obtains Result from all situations statistical between the start and end time. The default unit is the hour, be able to changes the "leave" statistical rule under leaves setting.

Workday (NDays): Depending on the clock in/out record, statistic employees' actually work day from Monday to Friday beyond holiday between the time ranges, the default unit is working day, ability to make a change under "Normal" statistical rule in the Attendance statistical rule page.

Weekend: Depending on clock in/clocking-out record, statistical employees actually from Saturday to Sunday beyond holiday between the time ranges; the default unit is working day, ability to make a change under "Normal" statistical rule in the Attendance statistical rule page.

Holiday: The holiday in which day employee actually takes work, the default unit is working day, ability to make a change under "Normal" statistical rule in the Attendance statistical rule page.

Working Hours (Att_Time): Depending on clock /in and clock/out record, total of employee's hours of on duty between the time range, the default unit is hour, accurate figure inhere after point two digital.

Overtime work (NDays_OT): Depending on the "overtime work" statistical rule in the Attendance rule, as well as the overtime and free overtime is effective in other exception situation list; carry on the computation of the statistical working hours from Monday to Friday beyond holidays between the time ranges.

Obtain result from all statistical situations in the start and end time. The default unit is the hour, able to change it under the "Overtime Work" statistical rule in the computation of Attendance rule page.

Weekend overtime work (Weekend_OT): Depending on the "overtime work" statistical rule in the Attendance rule, as well as the overtime and free overtime take effective in other exception situation list; carry on the computation of the statistical working hours from Saturday to Sunday beyond holidays between the time ranges.

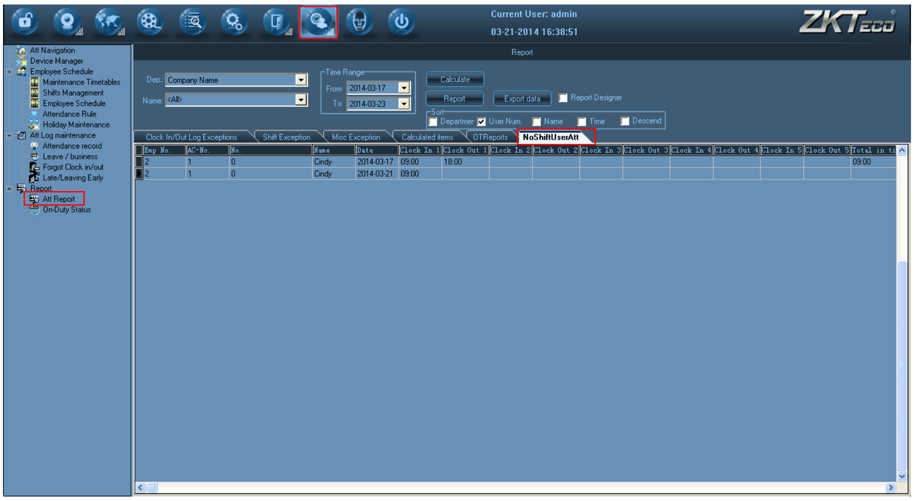
Obtain result from all statistical situations in the start and end time. The default unit is the hour, able to change it under the "Overtime Work" statistical rule in the computation of Attendance rule page.

Holiday Overtime (Holiday OT): Depending on the "Overtime work" statistical rule in the Attendance rule, as well as the overtime and free overtime is effective in other exception situation list; carry on the computation of the statistical working hours in holidays between the time ranges.

Obtain result from all statistical situations in the time range. The default unit is the hour, able to change it under the "Overtime Work" statistical rule in the computation of Attendance rule page.

- **NoShiftUserAll Report**

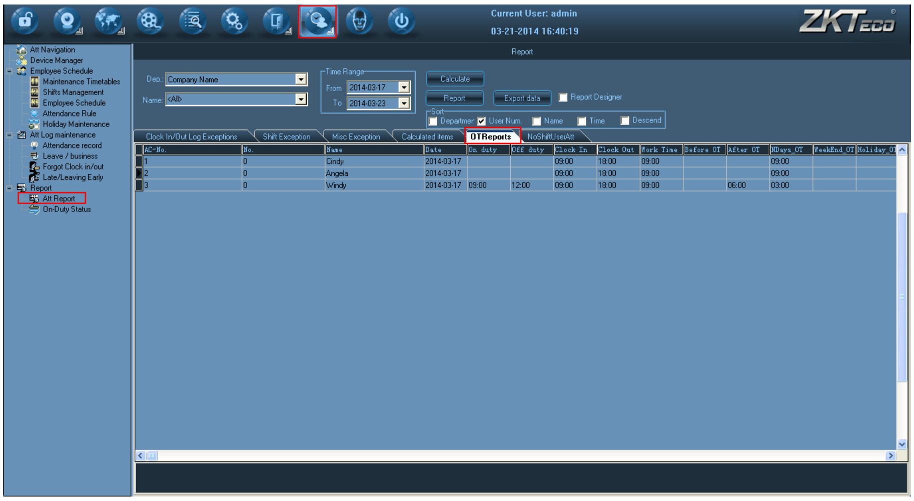
The NoShiftUserAll report facilitates the manager to view unscheduled employees and schedule for them.



The data fields in the NoShiftUserAll report include Emp No., AC-No., No., Name, Schedule, Auto-Assign, Date, Timetable, On duty, Off duty, Clock In, Clock Out, Normal, Real time, Late, Early, Absent, OT Time, Work Time, Exception, Must C/In, Must C/Out, Department, NDays, WeekEnd, Holiday, ATT_Time, Ndays_OT, WeekEnd_OT, and Holiday_OT. To select more items, right-click the page and select "Column" from the context menu. All available options appear and the ticked off items are selected fields.

- **Overtime Report**

The OTReports report statistics all overtime attendance records of employee.

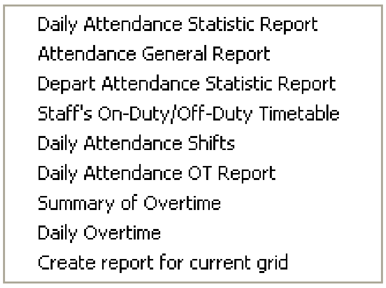


The data fields in the OTReports report include AC-No., No., Name, Date, On duty, Off duty, Clock In, Clock Out, Work Time, Before OT, After OT, NDays_OT, WeekEnd_OT, Holiday_OT, Total_OT and Meno. To select more items, right-click mouse and select "**Column**" from the drop-down menu. All available options appear and the ticked off items are selected fields.

- **Preview Report**

Not only search and modify these Attendance Records in Clock in/out log exception List, but also able to preview and print these Attendance records, these following list include, Daily Attendance statistical report, Attendance General report, Department Attendance Statistical Report, Staff's on-duty/off-duty

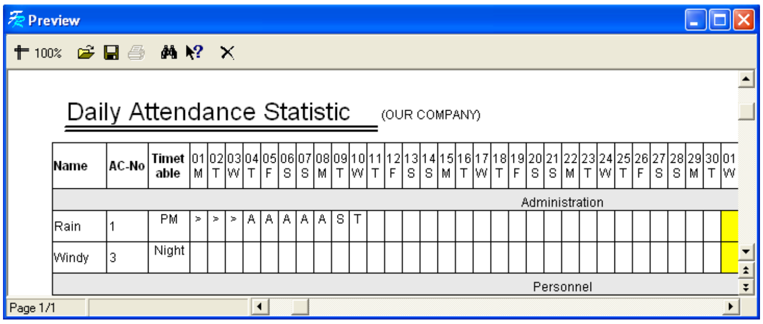
Timetable, Daily Attendance shifts, Create report for current grid, click "**Report** " button, pop up following menu:



1. Daily Attendance statistical Report

Daily Attendance statistical report is used to list the definite employee daily attendance status in assigned period of time in the table, and the statistics absence without excuse, coming lately /leaves early, working overtime, asking for leave, business trip, convenience of the checking whether has the discrepancy with the actual situation.

Note: In the table it is only can show detailed attendance status from the inquiry time from the month time, the report form may count in the start and end time situation which the user chooses, the start and end time scope appear on the right cancer.



In the table all shifts Timetable which each person uses will be list, and illustrate attendance status in the corresponding time and shift with the mark, for mark explain, and please see at the end of each page (In identification mark setting in Attendance computation rule).

Should arrive "**Working day**": The working day of the employee should arrive in the assigned time. The working day is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Actually arrive "**Working day**": The working day of the employee actually arrive in the assigned time. The working day is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Absence without an excuse "**Working day**": The day of the employee in the assigned time, who is absence from work without an excuse? The working day is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Coming lately "**Minute**": Total hour of the employee in the assigned time come late, the minute is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Leaves early "**Minute**": Total hours of the employee in the assigned time leave early, the minute is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Working overtime "**Hour**": Total hours of the employee in the assigned time overtime work. The hour is the unit of measurement "Recommend" able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Ask for leave "**Hour**": Total hour of the employee in assigned time ask for leave. The hour is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

Really until "**Working day**": The employee business trip in the assigned period time. The working day is the unit of measurement "Recommend", able to make a change in the Attendance rule. According to result in Attendance statistical table, output this item.

- **Report upper tool column**

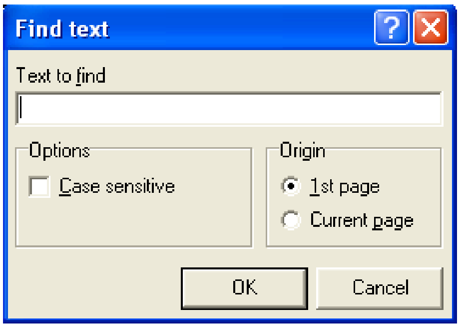
(1) Scale: Click "100%" button, and then choose the displaying proportion, preview report form.

(2) Opens report: Click "" button to open the report file which has saved before.

(3) Save: Click "" button to save the current report to the directly of your choice.

(4) Prints report: First connect with the printer, then click "" button to print the report form.

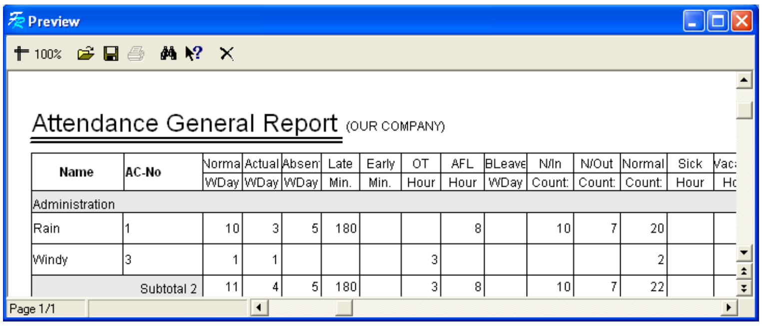
(5) Find text: Click "" button, pop-up the search text dialog box, input the text you look up, click "**OK**" button, the cursor will locate to the text which you search.



(6) Close preview: Click "" button to close preview.

2. Attendance General Report

Attendance General Report "The sum total of the Attendance statistical result table" is used to show the definite employee attendance statistical status in the assigned time, carry on the sum computation of employee attendance status, convenience of paying wages depending on the Attendance situation.



Attendance General Report (OUR COMPANY)

Name	AC-No	Norma WDay	Actual WDay	Absen WDay	Late Min.	Early Min.	OT Hour	AFL Hour	BLeave WDay	N/In Count:	N/Out Count:	Normal Count:	Sick Hour	Vac: Ho
Administration														
Rain	1	10	3	5	180			8		10	7	20		
Windy	3	1	1				3					2		
	Subtotal 2	11	4	5	180		3	8		10	7	22		

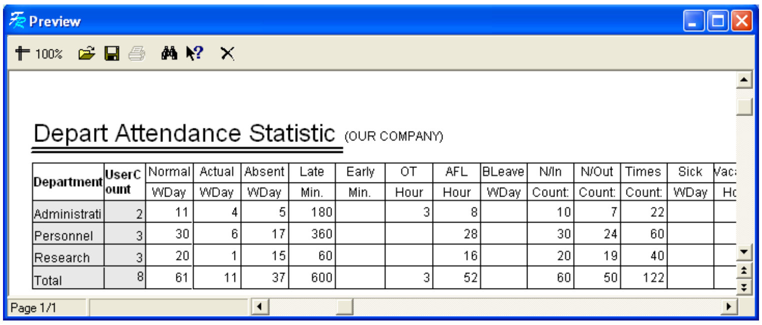
The computation of should arrive, actual, absence without an excuse, come late, leaves early, working overtime, asks for leave, business trip, the sick leave, leave, home leave same with daily calculating in the Time Attendance statistical table.

Working hours: Depending on daily employee clock-in/out time. Count the employee working hours Obtains result from all accumulation between the start and end time.

Attendance rate: divide the employee actually goes out on duty the number of times by employee should go out on duty the number of times. Above the report tool column is same with the **Daily Attendance statistical Report**.

3. Department Attendance Statistical Report

Department Attendance Statistical Report "The sum total of the Department Attendance statistical result table" take the department as the unit, sum total of all employees in the assigned department and period of attendance status, may know the sum attendance of department, facilitates reduces the scope, carries on the detail inquiry.



Depart Attendance Statistic (OUR COMPANY)

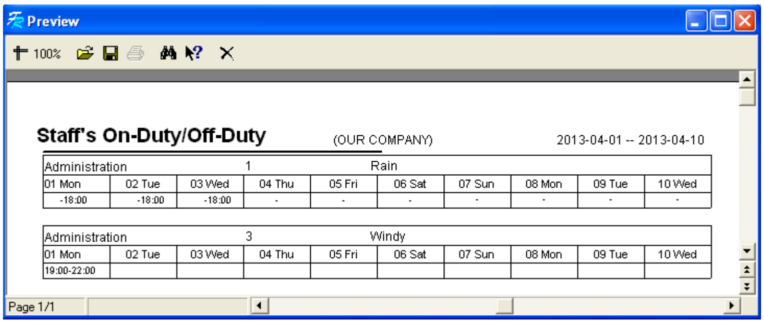
Department	UserCount	Normal WDay	Actual WDay	Absent WDay	Late Min.	Early Min.	OT Hour	AFL Hour	BLeave WDay	N/In Count:	N/Out Count:	Times Count:	Sick WDay	Vac: Ho
Administrati	2	11	4	5	180		3	8		10	7	22		
Personnel	3	30	6	17	360			28		30	24	60		
Research	3	20	1	15	60			16		20	19	40		
Total	8	61	11	37	600		3	52		60	50	122		

The computation of should arrive, actually arrive, absence without an excuse, coming lately, leaves early, working overtime, asking for leave, business trip, sick leave, leave, home leave same with daily Time Attendance statistical table. Only completely accumulate each department's personnel's situation.

Above the report tool column is same with **Daily Attendance statistical Report**.

4. Staff's On-Duty/Off-Duty Timetable

The time in which each employee actually come and go to work produce report, corresponding date and shift. Convenient for the administrator viewing, and may print.

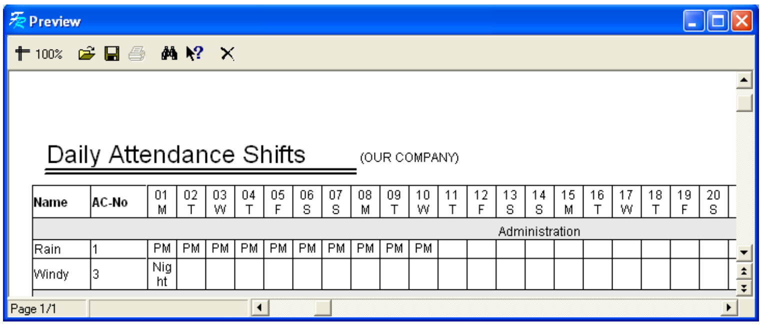


The most right side row corresponds the shift, list the all employee shift, which correspond date, the time of clocking-in /out display in the table.

Above the report tool column is same with **Daily Attendance statistical Report**.

5. Daily Attendance shifts

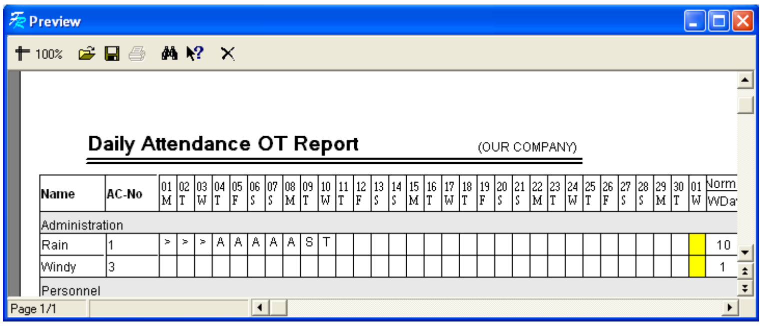
List the employee's shift which is used in Attendance every day, corresponding date, provide convenient for the administrator viewing shift, and printing.



Above the report tool column is same with **Daily Attendance statistical Report**.

6. Daily Attendance OT Report

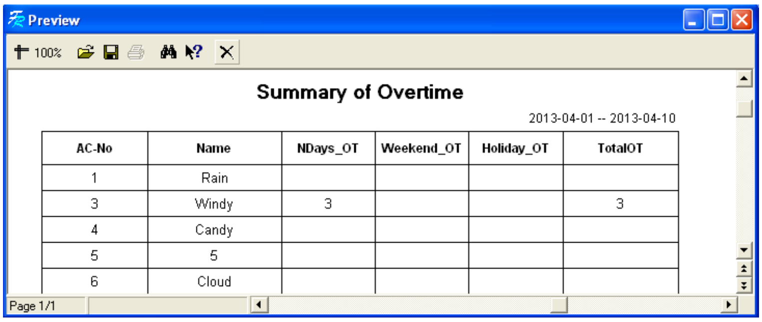
The **Daily Attendance OT Report** statistical the employee's daily attendance monthly.



Above the report tool column is same with **Daily Attendance statistical Report**.

7. Summary of Overtime

The **Daily Attendance OT Report** statistical the employee's summary of overtime. It contains **NDays_OT**, **Weekend_OT**, **Holiday_OT** and **TotalOT**.



Summary of Overtime

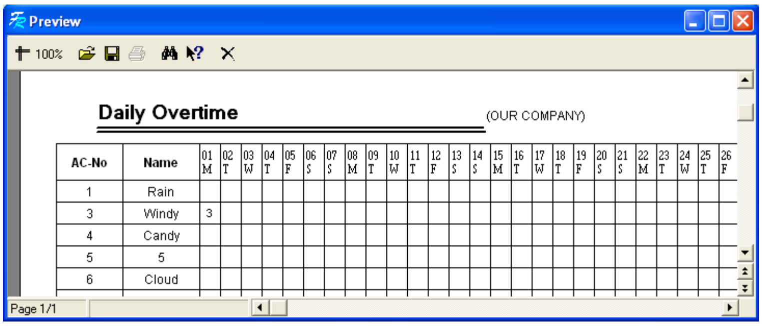
2013-04-01 -- 2013-04-10

AC-No	Name	NDays_OT	Weekend_OT	Holiday_OT	TotalOT
1	Rain				
3	Windy	3			3
4	Candy				
5	5				
6	Cloud				

Above the report tool column is same with **Daily Attendance statistical Report**.

8. Daily Overtime

Statistics and view the selected employees' detail of overtime**, NDays_OT**, **Weekend_OT** and **Holiday_OT.**



Daily Overtime (OUR COMPANY)

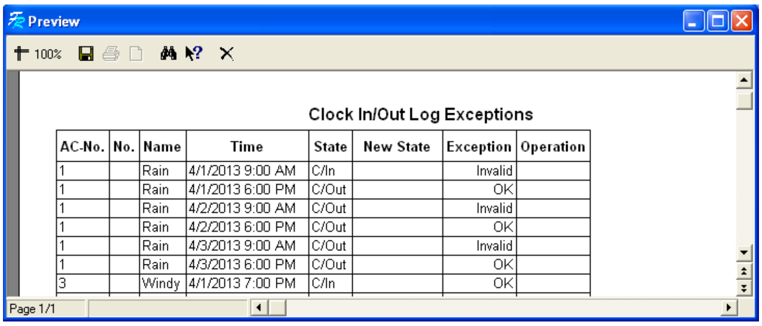
AC-No	Name	01 M	02 T	03 W	04 T	05 F	06 S	07 S	08 M	09 T	10 W	11 T	12 F	13 S	14 S	15 M	16 T	17 W	18 T	19 F	20 S	21 S	22 M	23 T	24 W	25 T	26 F
1	Rain																										
3	Windy	3																									
4	Candy																										
5	5																										
6	Cloud																										

Above the report tool column is same with **Daily Attendance statistical Report**.

9. Create report for current grid

The create report for current gird refers to produce report according to the current screen demonstrated format, provide convenient for the administrator reading, and printing

Current data report page of **Clock In/Out Log Exceptions**:

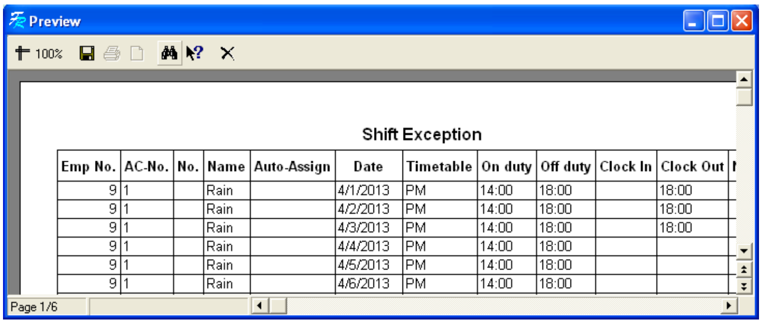


Clock In/Out Log Exceptions

AC-No.	No.	Name	Time	State	New State	Exception	Operation
1		Rain	4/1/2013 9:00 AM	C/In		Invalid	
1		Rain	4/1/2013 6:00 PM	C/Out		OK	
1		Rain	4/2/2013 9:00 AM	C/Out		Invalid	
1		Rain	4/2/2013 6:00 PM	C/Out		OK	
1		Rain	4/3/2013 9:00 AM	C/Out		Invalid	
1		Rain	4/3/2013 6:00 PM	C/Out		OK	
3		Windy	4/1/2013 7:00 PM	C/In		OK	

If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Current data report page of **Shift Exception**:

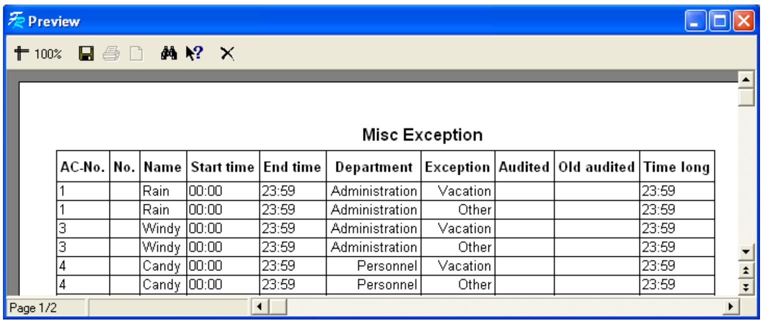


Shift Exception

Emp No.	AC-No.	No.	Name	Auto-Assign	Date	Timetable	On duty	Off duty	Clock In	Clock Out
9	1		Rain		4/1/2013	PM	14:00	18:00		18:00
9	1		Rain		4/2/2013	PM	14:00	18:00		18:00
9	1		Rain		4/3/2013	PM	14:00	18:00		18:00
9	1		Rain		4/4/2013	PM	14:00	18:00		
9	1		Rain		4/5/2013	PM	14:00	18:00		
9	1		Rain		4/6/2013	PM	14:00	18:00		

If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Current data report page of **Misc Exception**:

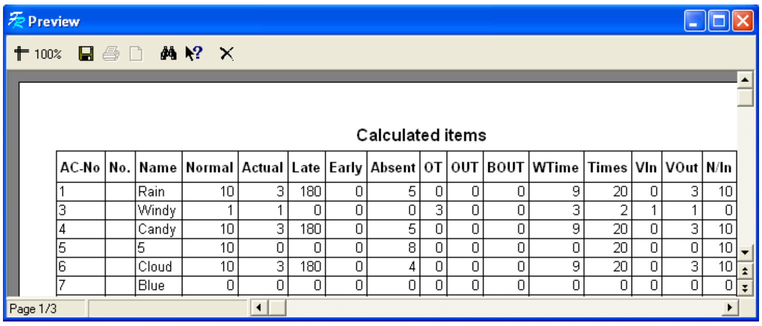


Misc Exception

AC-No.	No.	Name	Start time	End time	Department	Exception	Audited	Old audited	Time long
1		Rain	00:00	23:59	Administration	Vacation			23:59
1		Rain	00:00	23:59	Administration	Other			23:59
3		Windy	00:00	23:59	Administration	Vacation			23:59
3		Windy	00:00	23:59	Administration	Other			23:59
4		Candy	00:00	23:59	Personnel	Vacation			23:59
4		Candy	00:00	23:59	Personnel	Other			23:59

If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Current data report page of **Calculated items**:

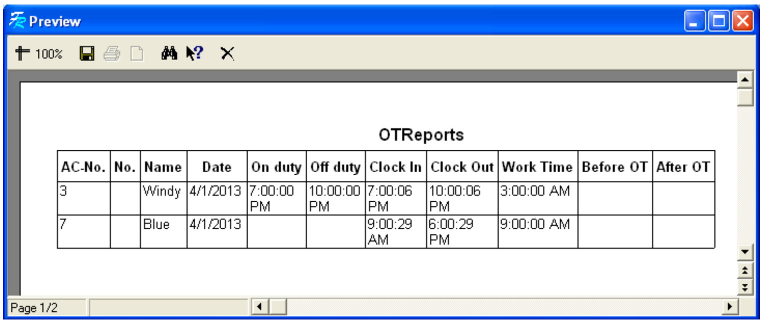


Calculated items

AC-No	No.	Name	Normal	Actual	Late	Early	Absent	OT	OUT	BOUT	WTime	Times	VIn	VOut	N/In
1		Rain	10	3	180	0	5	0	0	0	9	20	0	3	10
3		Windy	1	1	0	0	0	3	0	0	3	2	1	1	0
4		Candy	10	3	180	0	5	0	0	0	9	20	0	3	10
5		5	10	0	0	0	8	0	0	0	0	20	0	0	10
6		Cloud	10	3	180	0	4	0	0	0	9	20	0	3	10
7		Blue	0	0	0	0	0	0	0	0	0	0	0	0	0

If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Current data report page of **OTReports**:

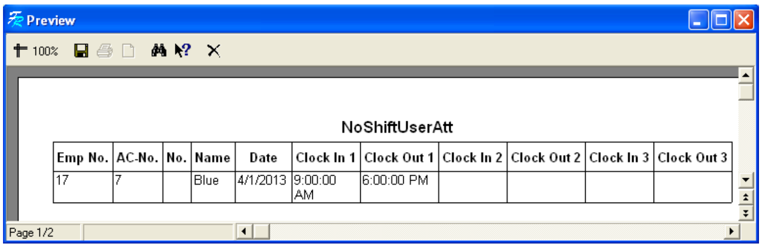


OTReports

AC-No.	No.	Name	Date	On duty	Off duty	Clock In	Clock Out	Work Time	Before OT	After OT
3		Windy	4/1/2013	7:00:00 PM	10:00:00 PM	7:00:06 PM	10:00:06 PM	3:00:00 AM		
7		Blue	4/1/2013			9:00:29 AM	6:00:29 PM	9:00:00 AM		

If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Current data report page of **NoShiftUserAtt**:



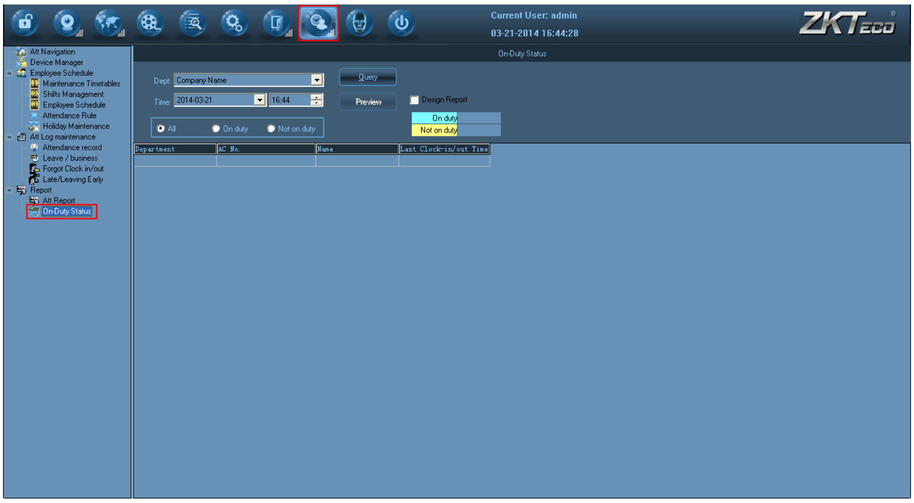
If need to show much more columns, may right-click mouse on the data row, and then select columns to show.

Export data

Export the data you inquire to Excel or the text file, backup and save it, in order to consult in the future. For detail operation please see 7.5 Export Data.

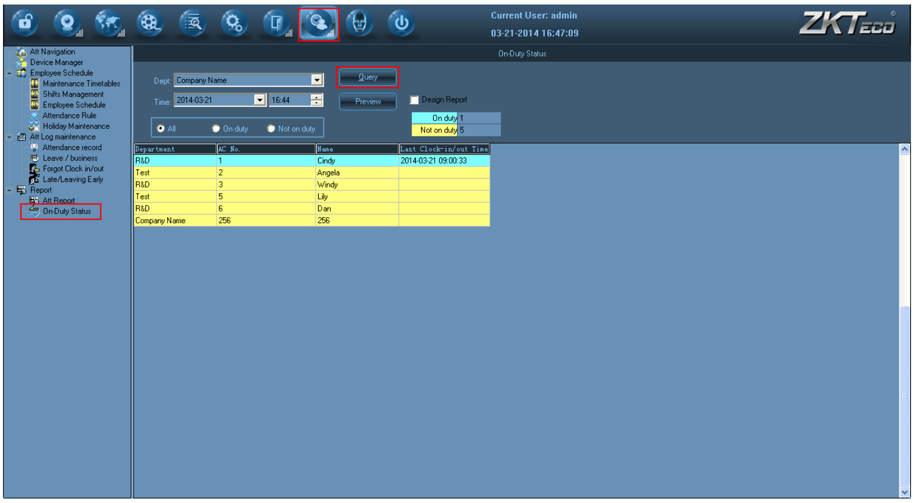
4.8.4.2 On-duty Status

Click **Attendance Function** icon  > **On-duty Status** to enter the **On-duty Status** interface:

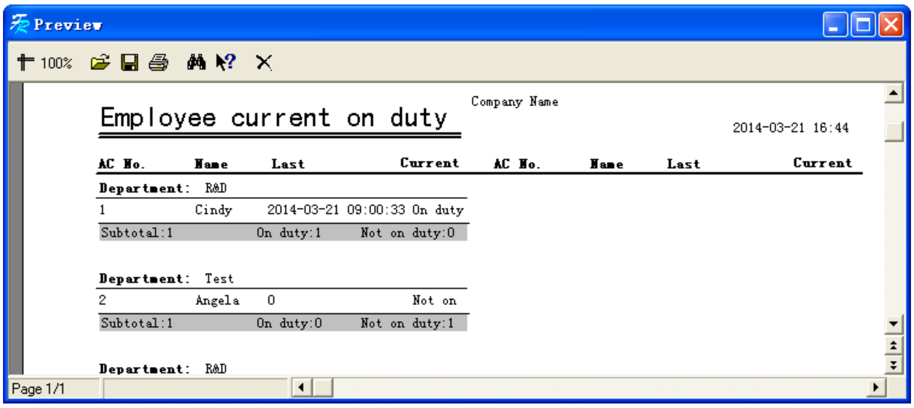


After select **Department** and **Time**, click 

button, check the result, show as below:

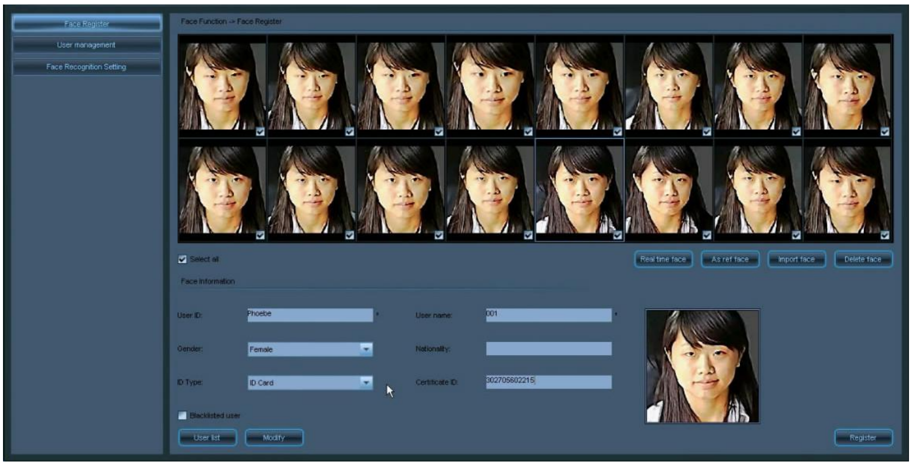


Click  button, preview the style of report, show as below:



Preview the report, on this window, user can print and save file, etc. Click print button "🖶" on the leftward of the top tool bar, can print report.

4.8 Face Function



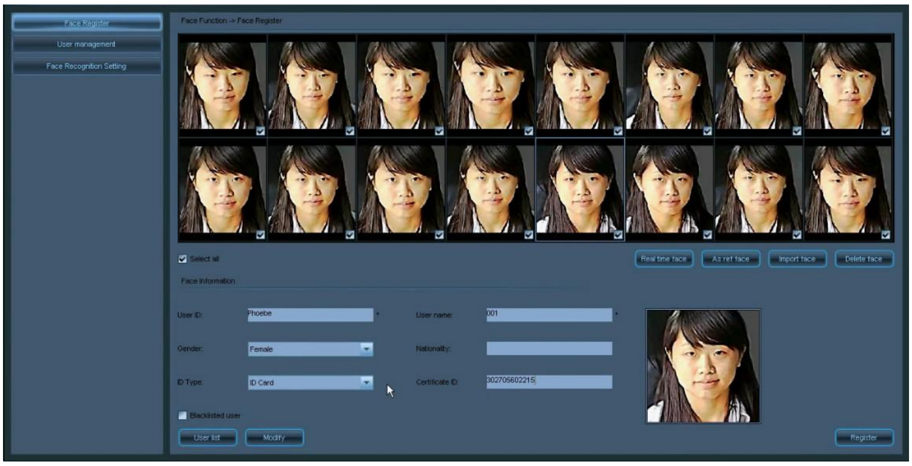
On this page, you can register face users and set face identification parameters.

✧ **Description of the icon functions in the Face Function working area**

Icon	Function Description
Add	Add face user
Modify	Save modified information
Delete	Delete the ticked users
Default	Restore parameters to the default values.
Save	Save modified parameters
Cancel	Cancel the modification

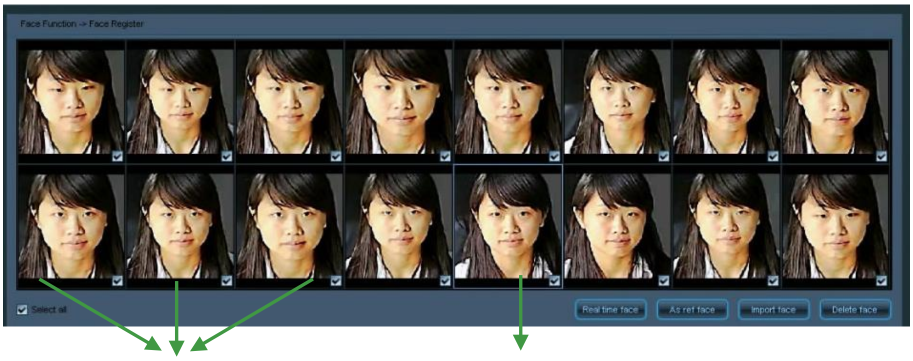
Notes: **(1)** Face identification function is available for a maximum of one video device. **(2)** For the configuration and application of face identification function, see 5.23 How to Set and Apply Face Function.

4.8.1 Face Registration



✧ **Face Template List**

After right clicking **Enabling Face Identification** on the preview page, you can add the detected faces to this list, or you can manually import face pictures to this list. The system will extract a face template from the ticked picture on the template list and use it as the face template for the currently registered user.

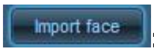


Currently ticked face images

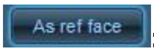
The blue cell indicates currently chosen position or face image

Select all: Tick all the pictures on the list.

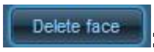
Real time face: The previously detected face images are used as face templates. The system can store a maximum of 500 real-time face images. If there are more than 500 face images, the earliest ones will be replaced.



: You can manually import local face pictures. The picture must be in the JPG format and its size must be the multiple of 16, for example, 320*480. There can only be one face in the picture and the face should be as regular as possible.



: If you click this button, the currently chosen face picture (in blue cell) will be used as the reference picture for the currently registered user.



: Delete currently ticked pictures.

✧ **Face Registration Information**

User ID: It is the ID of a user; the IDs that have already been added to the system cannot be changed; the unregistered IDs can be added to the system.

User name: It is the name of a user, which can be changed according to actual circumstances.

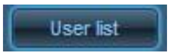
User gender: Female or male.

User native place: It is the native place of a user, which can be changed according to actual circumstances.

ID type: ID card, passport, driving license or other certificates.

Certificate number: The certificate number can be changed according to actual circumstances.

Blacklist user: Ticking this option, you can set this user as a blacklist user.

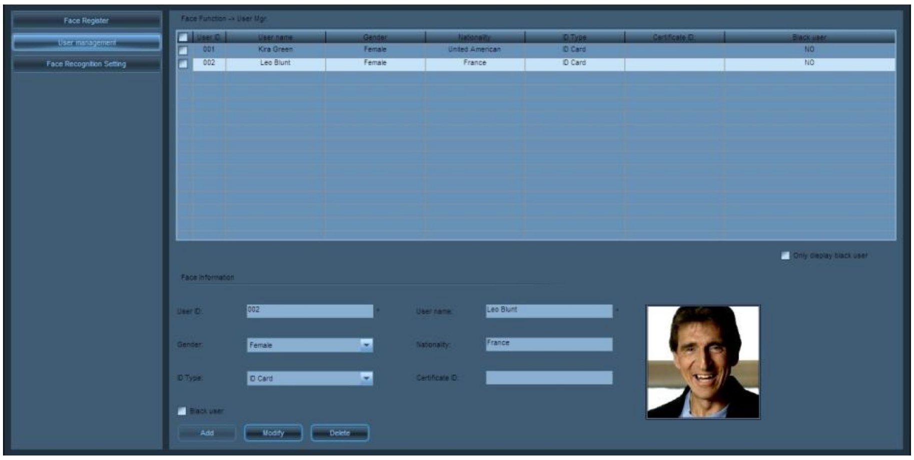


: Click to access the registered user list.

Click to select one user on the registered user list, click **Confirm** and this user's face registration information will be displayed on the face registration page. Now you can modify this user's information. Click **Modify** to save the modification.

: After setting face registration information, click this button to register the user.

4.8.2 User Management



Display blacklist users only: If you click this option, only blacklist users will be displayed on the user list.

User ID: It is the ID of the user; the IDs that have already been added to the system cannot be changed; the unregistered IDs can be added to the system.

User name: It is the name of a user, which can be changed according to actual circumstances.

User gender: Female or male.

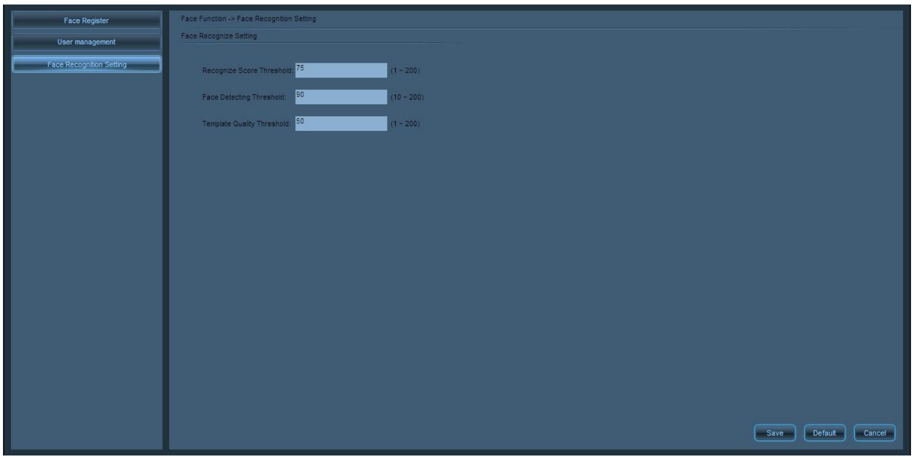
User native place: It is the native place of a user, which can be changed according to actual circumstances.

ID type: ID card, passport, driving license or other certificates.

Certificate number: The certificate number can be changed according to actual circumstances.

Blacklist user: Ticking this option, you can set this user as a blacklist user.

4.8.3 Parameter Setting



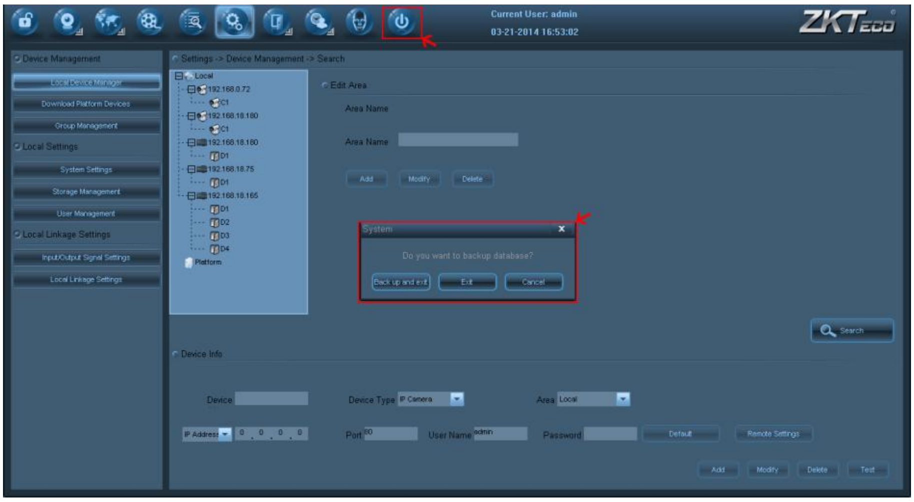
Threshold value for face identification marks: It is the similarity threshold value of a detected object compared with the user face template in the database. A smaller threshold value makes it easier for the system to identify a face; however, misjudgment is apt to occur. A greater value ensures a more accurate identification of a face, but it is possible that the system cannot identify the face. So a moderate value is recommended.

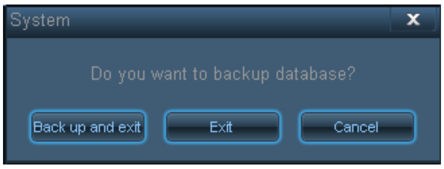
Face detection quality threshold value: It is the similarity threshold between the detected object and the face. A smaller threshold value makes identification more sensitive, but it is likely for the system to identify a similar face as the exact face. A greater value makes it possible for the system to miss detecting faces. So a moderate value is recommended.

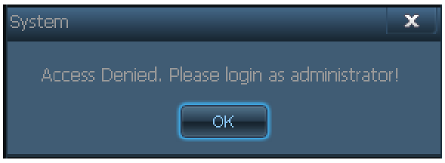
Template quality threshold value: It is the threshold value for face features. A greater threshold value ensures a clearer contour of a detected face.

Min face size: The minimum size of captured face images. The width and height cannot be smaller than 160 and 200 respectively.

4.9 Logout







Back up and exit: The system backs up the configuration and exits. The default backup path is Installation Path\Database_Backup.

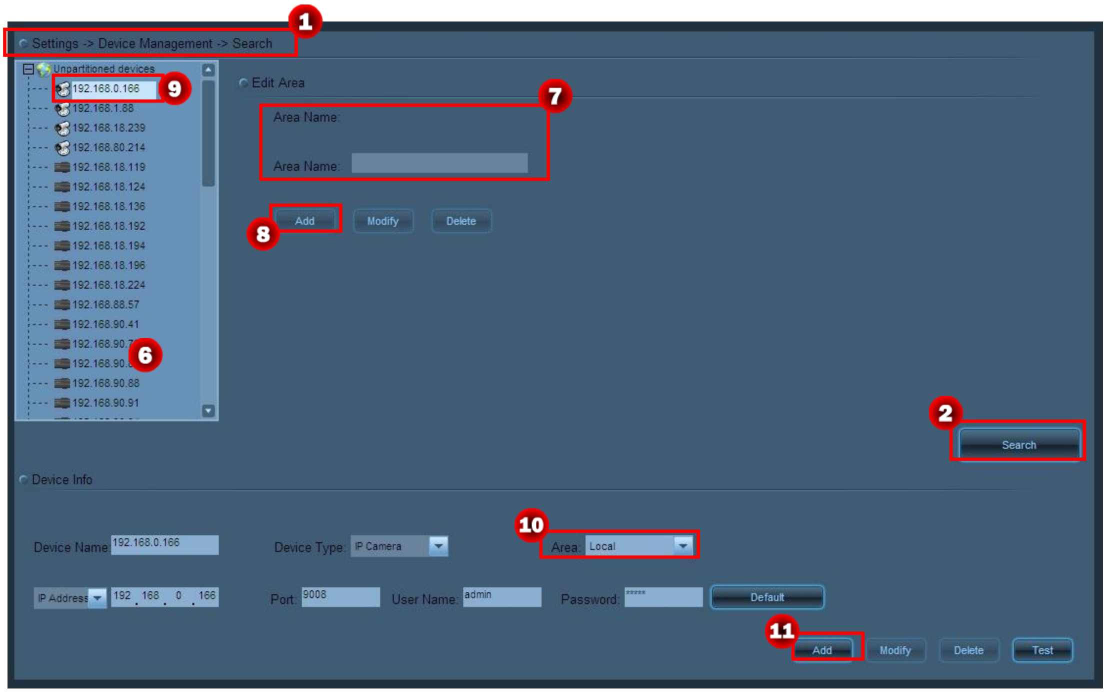
Exit: The system exits directly if you click Exit.

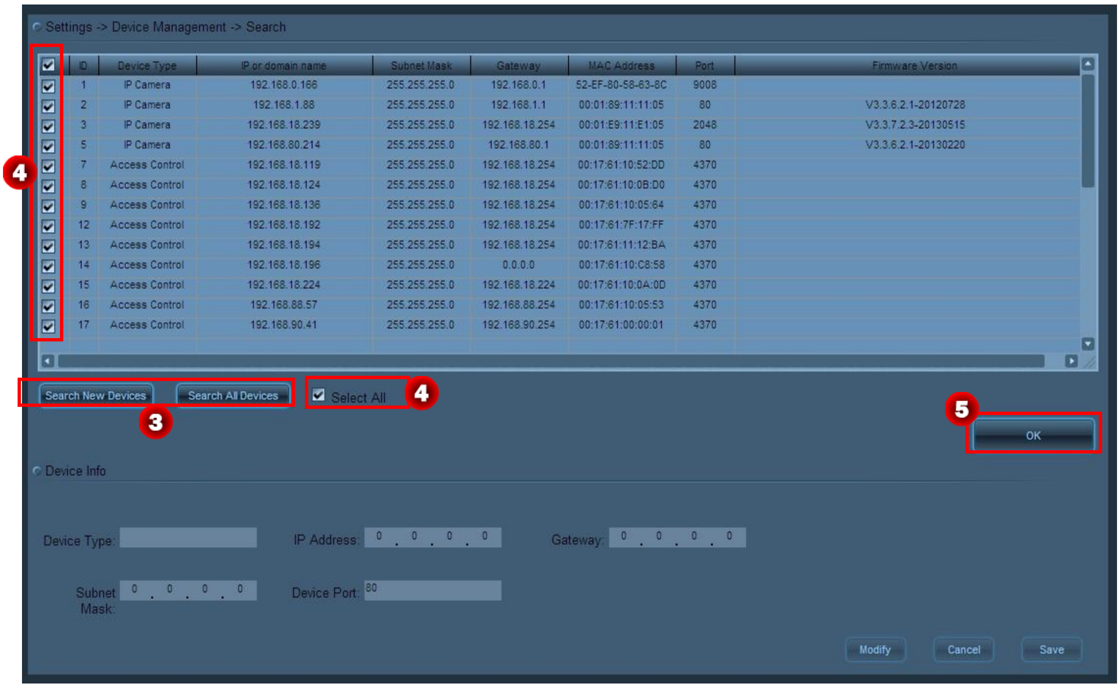
Cancel: The system cancels exiting if you click Cancel.

Note: Only super users and the custom users with a system shutdown authority can exit the client software.

5 Configuration

5.1 How to Search and Add Camera/NVR/Access Controller to an Area

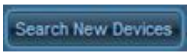




1. Enter the **Settings** > **Local Device Manager** > **Search** interface.

2. Click 

to enter the device search interface.

3. Click 

or 

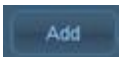
to search devices.

4. Select the device to be added or select ***Select All*** to select all devices in the search list.

5. Click  to finish the device searching.

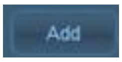
6. Click and select the parent area in the device list.

7. Set the field of Area Name.

8. Click  to add this named area to the parent area.

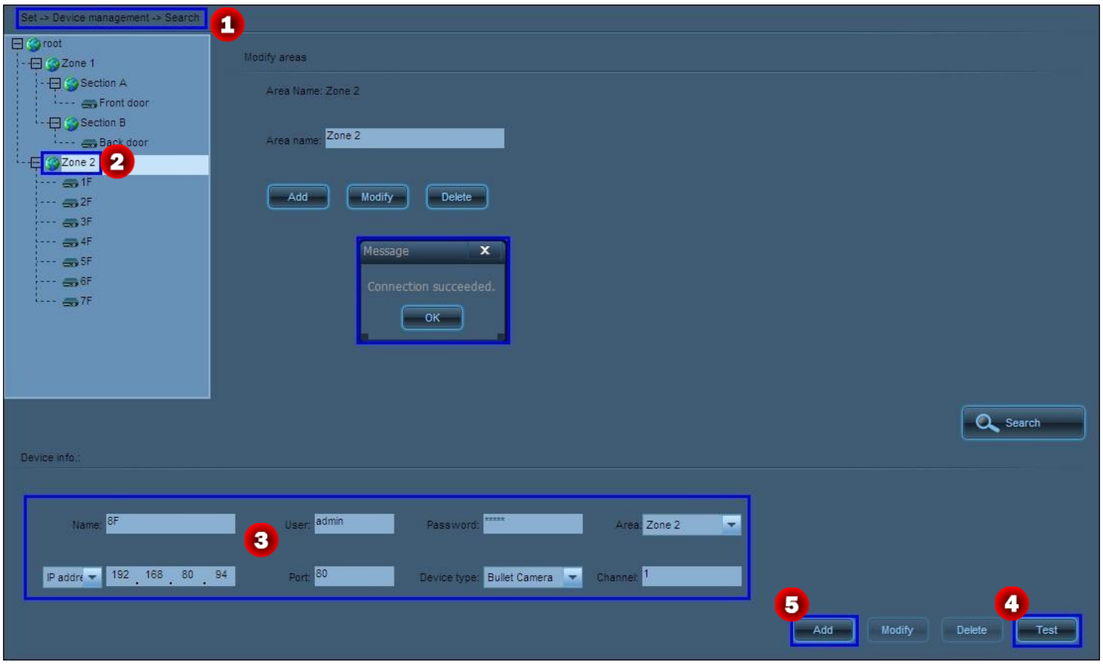
9. Select an unpartitioned device in the device list.

10. Set the field of Area in **Device Info**.

11. Click  to add this device to the area.

Notes: **(1)** Up to 128 areas can be added. **(2)** After device search is completed, the camera cannot videotape or capture images unless it is added to an area. Unpartitioned devices cannot be used.

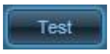
5.2 Manually Add a Device to the System



1. Choose **Settings** > **Device Management** > **Search** to enter the **Search Device** interface.

2. Click a parent area in the device list.

3. Manually fill in information about the to-be-added device in the **Device info** pane.

4. Click  to check whether connection succeeds.

5. After confirming the connection succeeds, click  to add the camera to the system.

Note: If a device has no fixed IP address on a public network, you can gain access to this device by using a domain name provided by the domain name supplier. In this case, you must manually add this device to the system. For details of domain name registration and device configuration, see 5.20 Apply for and Use a Dynamic Domain Name for Visiting IPC on Internet.

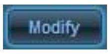
5.3 Modify Local Device Information

1. Choose **Settings** >**Local Device Manager**.

2. Click a camera channel in the device list.

3. Modify the device information in the **Device info** pane.

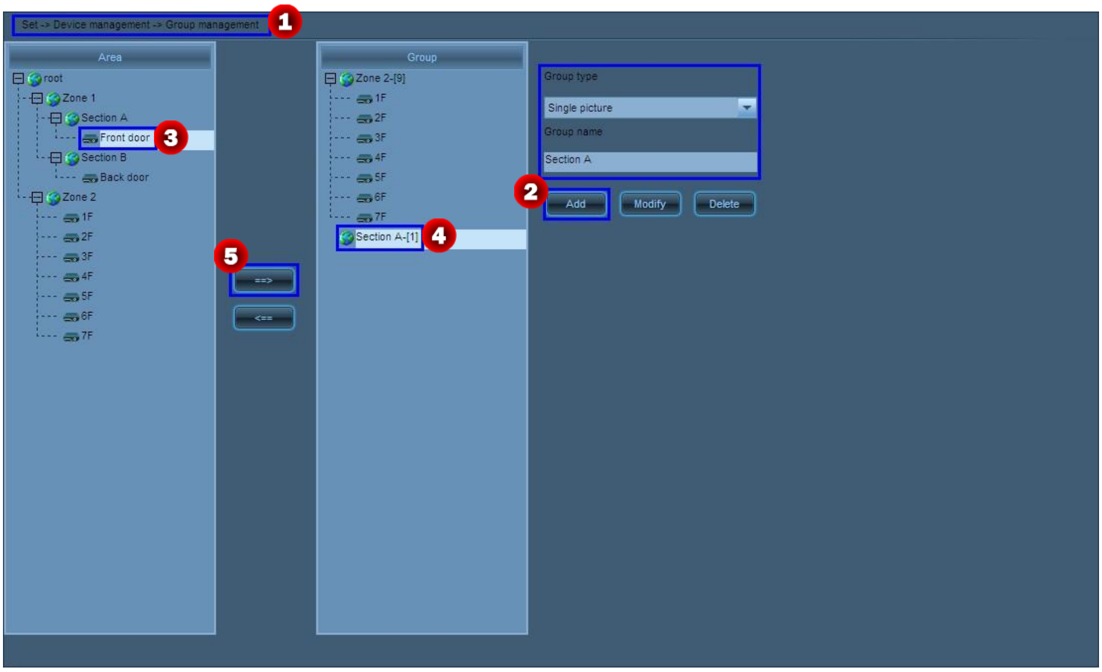
4. Click 

or 

to save modification.

Notes: **(1)** After a device name is set, the device list displays only the name instead of the IP address of the device. **(2)** This section describes the procedure for modifying related local device information. For details of modifying remote device parameters (such as IP addresses and port numbers), see 5.5 Modify Network Parameters of a Camera.

5.4 Group Cameras



1. Choose **Settings** > **Device management** > **Group management**.

2. Set the group type and group name and click Add to add a new group.

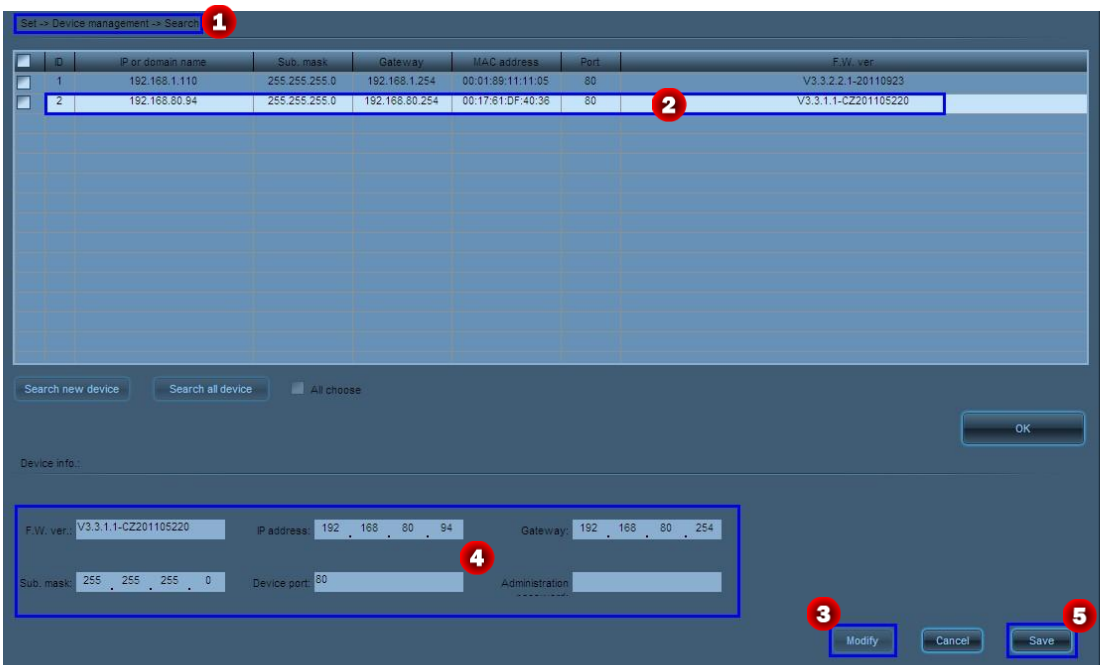
3. Click a camera channel in the device list.

4. Click a group in the group list.

5. Click ==> to add the selected camera channel to this group.

Note: Up to 20 groups can be added.

5.5 Modify Network Parameters of a Camera



1. Choose **Settings** > **Device management** > **Search**.

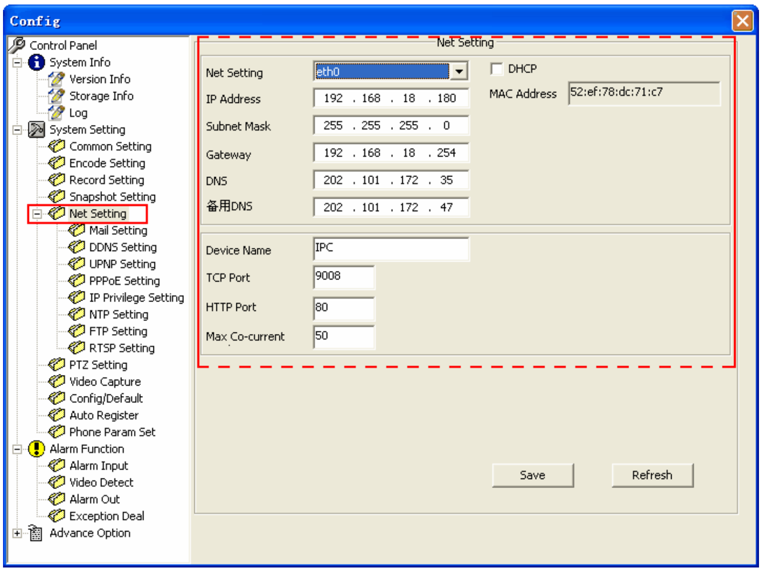
2. Select a camera from the search result list.

3. Click Modify and then modify the remote device information of this camera.

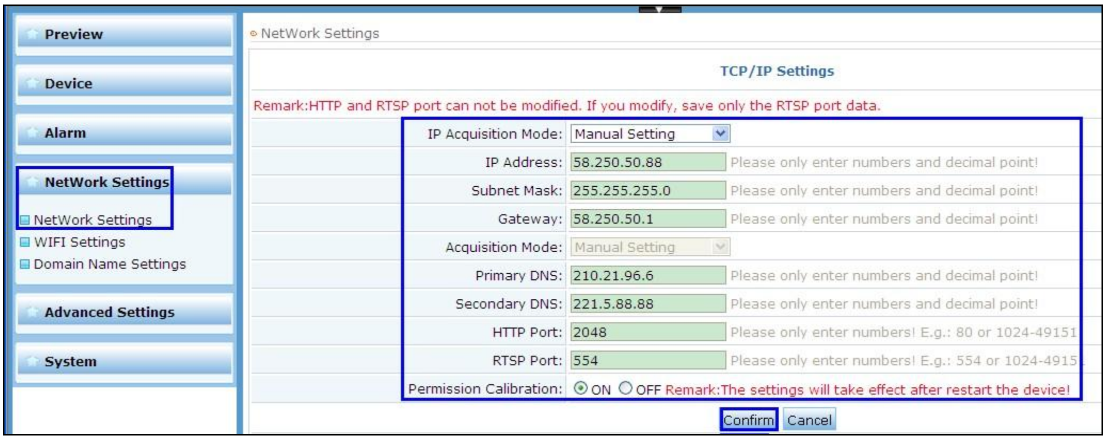
4. Enter a correct admin password and click Save to save your settings.

Note: You can also modify network parameters of a camera in the following two methods.

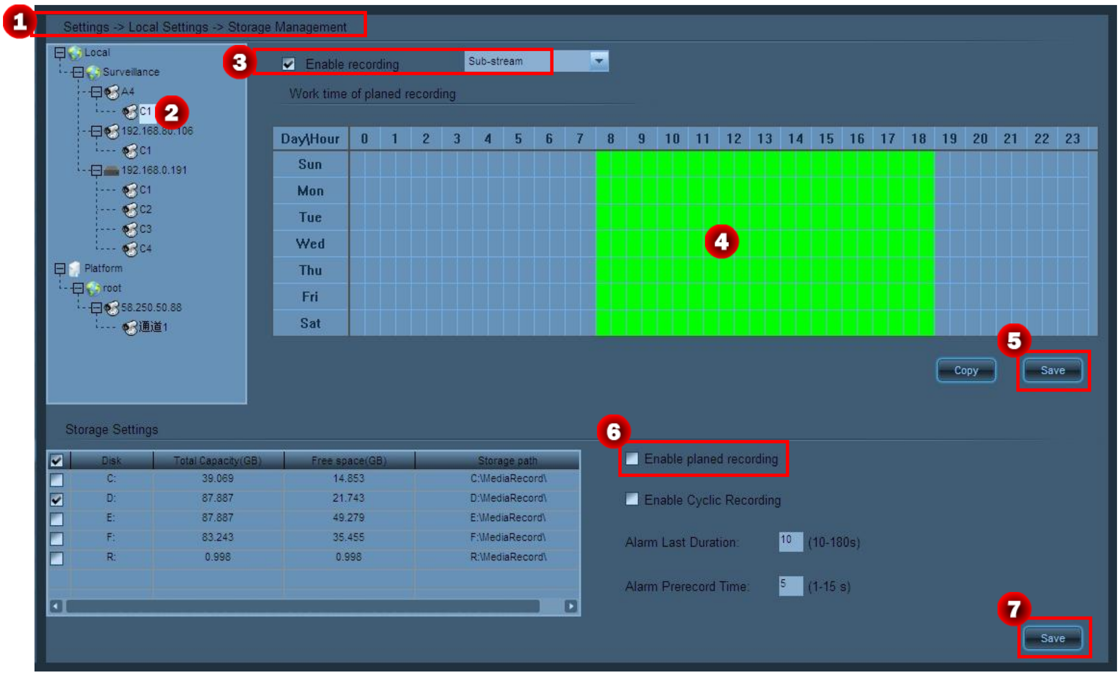
Method 1: Click Remote Settings button to enter the **Net settings** interface.



Method 2: Access a camera through browser and choose **Network settings**>**Network settings** to modify network parameters of the camera in the **Network settings** pane. For details, see Network Settings in the *User Manual--Using Browser for Video Surveillance* in the delivery-attached CD.



5.6 How to Set Timed Recording



1. Enter the **Settings** > **Local Settings** > **Storage Management** interface.

2. Double-click the camera channel to be set to time recording in the device list to connect it.

3. Select **Enable recording** to enable the recording function. Choose the stream format of recording.

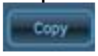
4. Drag the left mouse button to set the work time of planed recording (0~23 indicates one day, measured in half an hour).Drag again to cancel.

5. Click  to save the settings.

6. Select **Enable planed recording**.

7. Click  to save the settings.

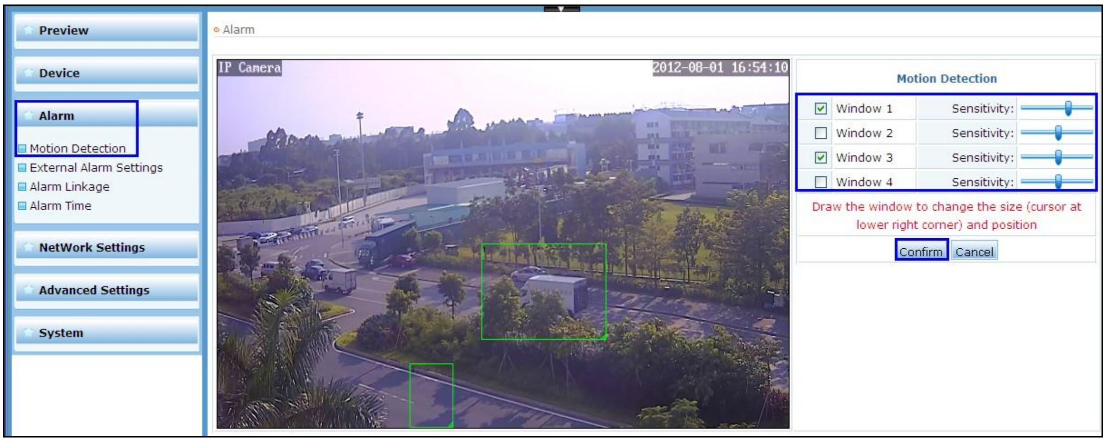
8. Disable the planed recording: Deselect **Enable planed recording**, and click  to save. Or cancel the green squares in the work time of planed recording and click  to save.

Note: If the work time of planed recording of all devices is the same, set the work time of planed recording for one device, click  to set the copied content, and click  to save the settings. Then all devices enable planed recording.

5.7 Set Motion Detection

The detail operations, please see 4.6.1.2 Device Information Management > **Remote Settings** >**Alarm Settings** > **Motion Detection**.

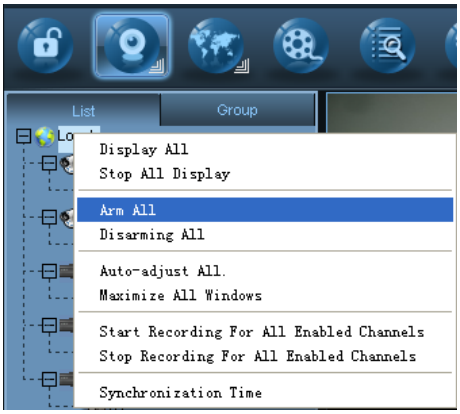
Note: You can also access a camera through BROWSER and choose **Alarm**>**Motion Detection** to set motion detection parameters. For details, see Motion Detection in the *User Manual--Using Browser for Video Surveillance* in the delivery-attached CD.

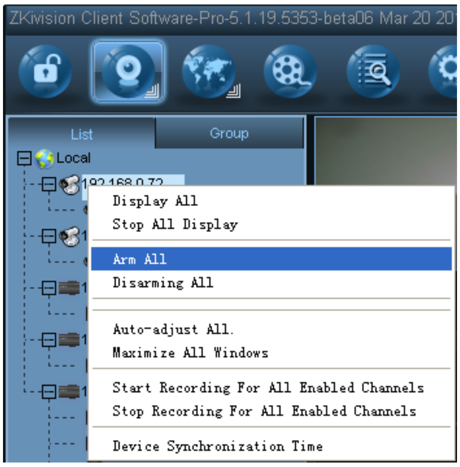


5.8 Enable Arming

The alarm linkage of all signals will work only after the device (the camera) is armed. If the device is disarmed, it cannot produce alarm linkage.

Enter Preview interface, right click on the area name in the device list, and choose **All Arming** in the function menu to enable all alarm linkage of all devices in this area. Right click on the device name in the device list, and choose **Arm All** in the function menu to enable all alarm linkage of all channels in this device.





5.9 Set Alarm Linkage

1. Add Alarm Linkage Information. For detail, please see [4.6.8 Local Linkage Settings](#).

2. Set the storage location and time length for the alarm linkage video.

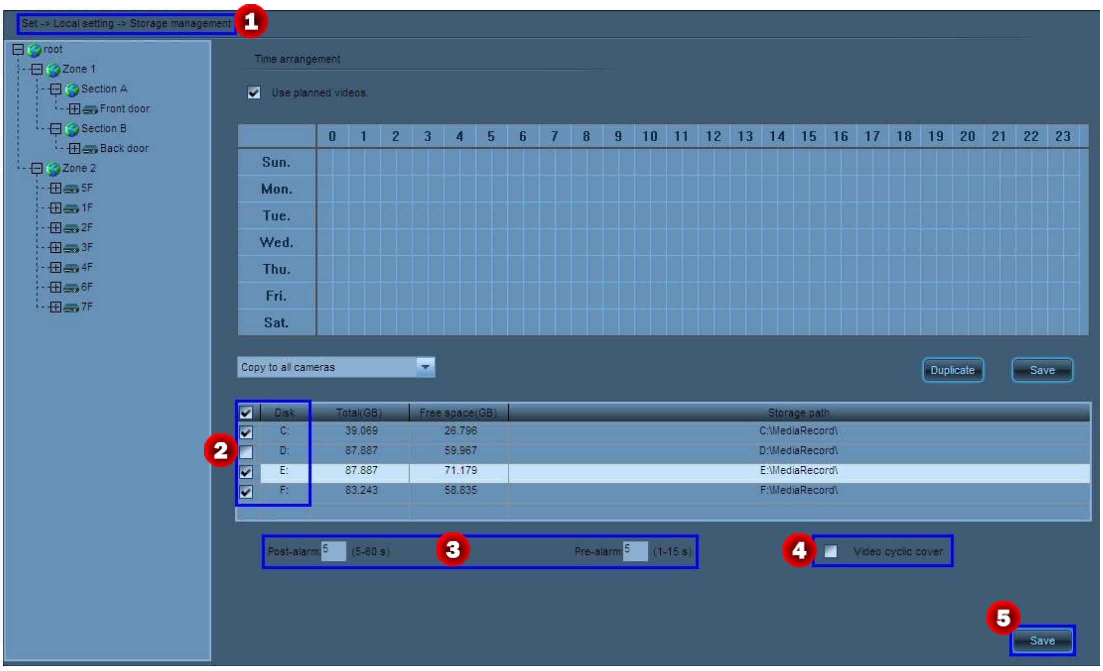
(1) Access the **Settings** > **Local Settings** > **Storage Management** interface to set alarm linkage video.

(2) Tick the storage location for the video (After the installation, the software will automatically detect the hard disks of the computer and display them on the list).

(3) Set alarm video: the lasting time of the alarm and the time for pre-recording an alarm.

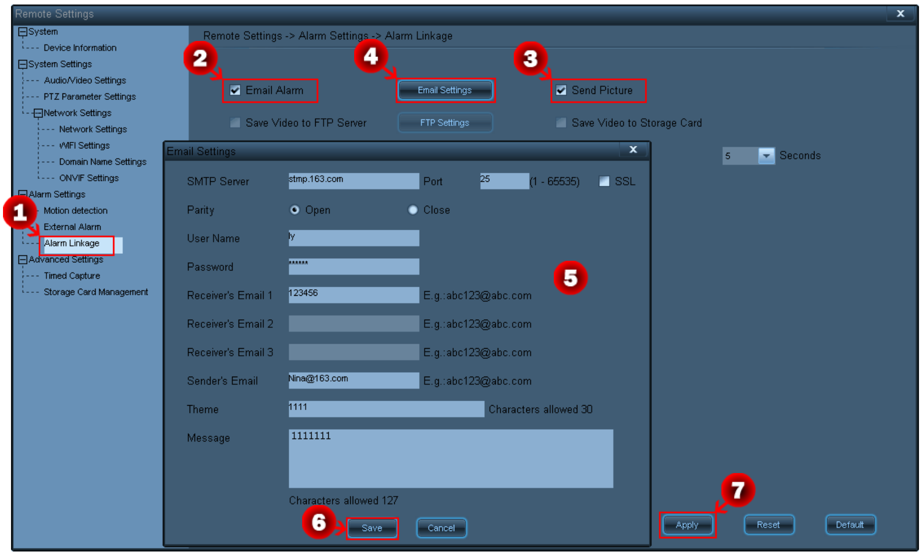
(4) If you tick **Video Cyclic Cover**, then when all the space of the disk is occupied, the earlier 5G video file will be deleted. If you cancel the tick, then when the disk is full, the video recording will stop.

(5) Click **Save** to save the setting.



Note: (1) You can select other camera channels and click **Copy** to copy the alarm linkage setting to other cameras. **(2)** After arming, an alarm will trigger the alarm linkage options.

5.10 How to Set Email Linkage Alarm



1. Click **Settings** > **Local Device Manager** to enter the Local Device Manage interface. Select device in the Local Area List, and then click 

button to enter the **Remote Settings** window.

2. Shift to **Alarm Linkage**.

3. Select **Email Alarm** to enable email alarm function.

4. After enabling the email alarm function, select **Send Picture** to send the captured pictures to the preset email.

5. Click **Email Settings** to directly enter the email settings interface linked to this interface.

6. Set the following items based on actual needs.

SMTP Server: is the IP address of SMTP server. See your mailbox settings for details.

Port: Is 25 by default. To modify the port, please contact your network administrator or consult professionals.

SSL: Select the box to enable secure connection. See your mailbox settings for details.

Parity: If you select **Open**, you need to input the user name and password for communications upon successful validation; if you select **Close**, you do not need to input the user name and password for validation.

User Name: is the name of email.

Password: is the password of email.

Receiver's Email: is the email address to receive alarm emails. Please input at least one email address.

Sender's Email: is the address displayed in the alarm emails.

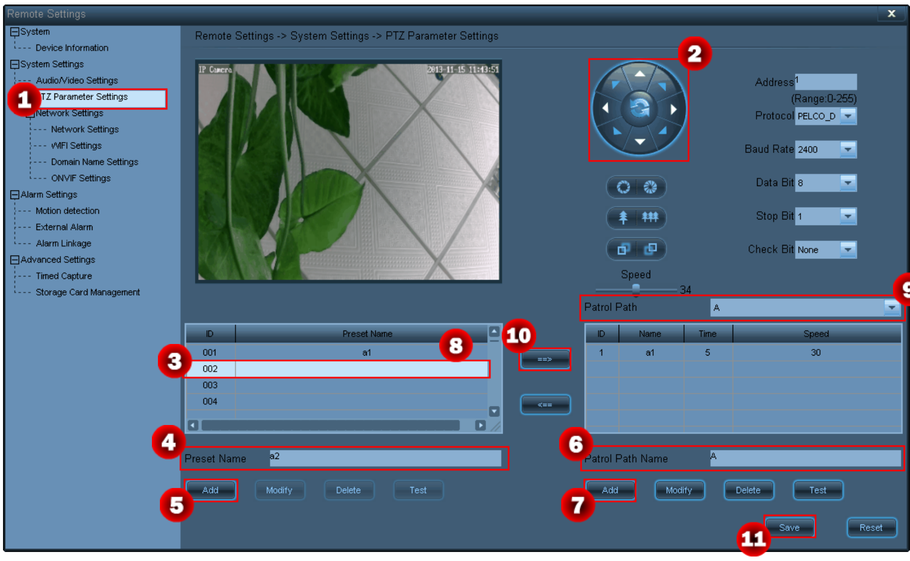
Theme: is the subject of the alarm emails.

Message: is the content of the email.

7. After finishing the settings, click Save to save the email settings, and click **X** to exit from the email settings interface.

8. Click Apply to enable the email alarm linkage settings.

5.11 Configure Preset Locations and Cruise Routes



1. Click **Settings** > **Local Device Manager** to enter the Local Device Manage interface. Select device in the Local Area List, and then click Remote Settings button to enter the **Remote Settings** window. Shift to **PTZ parameter settings**.

2. Adjust the camera to the desired location.

3. Select the ID of a preset location.

4. Set the name of the preset location.

5. Click Add to add the preset location.

6. Set the name of a cruise route.

7. Click Add to add the cruise route.

8. Click a preset location in the preset location list.

9. Select a cruise route from the **Cruise route** drop-down list.

10. Click ==> to add the preset location to this cruise route.

11. Click Save to save your settings.

5.12 Search and Playback Videos by Date

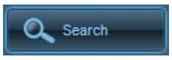
Take the local playback as an example. To perform other types of playback, please see [4.4 Playback](#).

1. Click  to enter **Playback** interface.

2. Select devices based on date type.

3. Select a video type from the drop-down list.

4. Select a date.

5. Click 

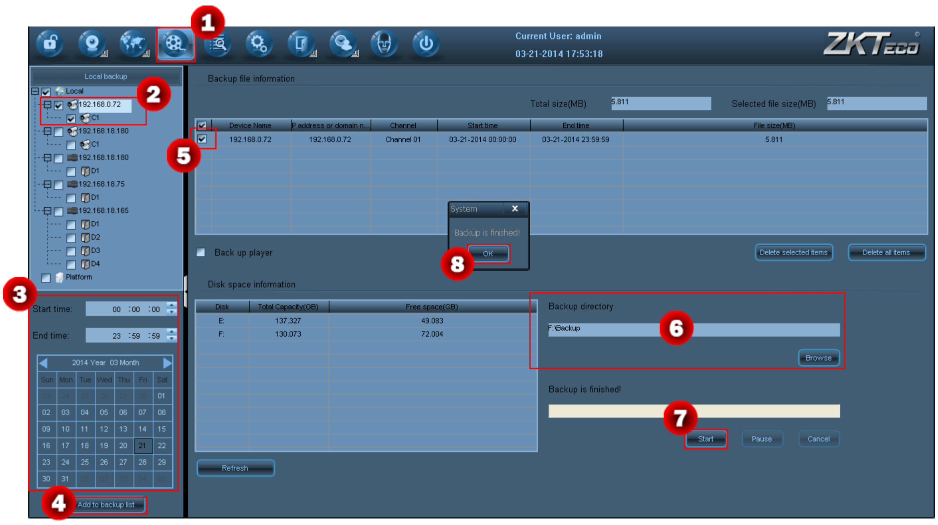
to search for videos and the search results are displayed on the Timeline panel.

6. Click on the Timeline panel as the start point for playback.

7. Click  to start playing back videos.

Note: **(1)** A maximum of four channels can be selected for video search and play back by date. **(2)** When replaying a video, the replay will be stopped if changing the page.

5.13 Back Up Videos



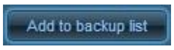
Take the local backup as an example.

1. Enter **Playback** interface and click **Local Backup** to enter the page of video backup.

2. Tick the cameras for video search.

3. Set the specific period.

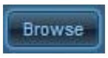
4. Select the date.

5. Click 

to add the searched videos to the backup list.

6. Tick the videos to be backed up.

7. Select whether to back up the media player.

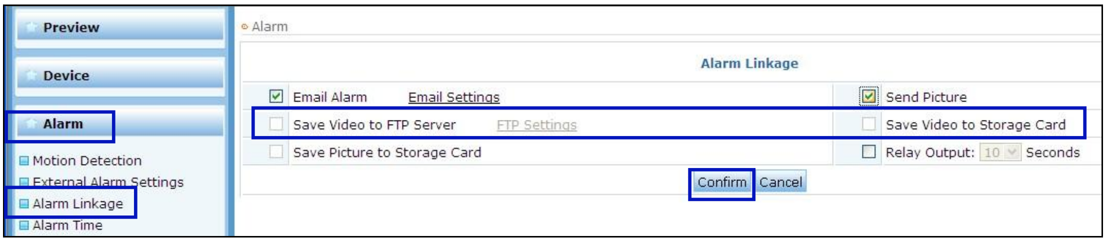
8. Click the button 

to set the path of backup.

9. Click the button 

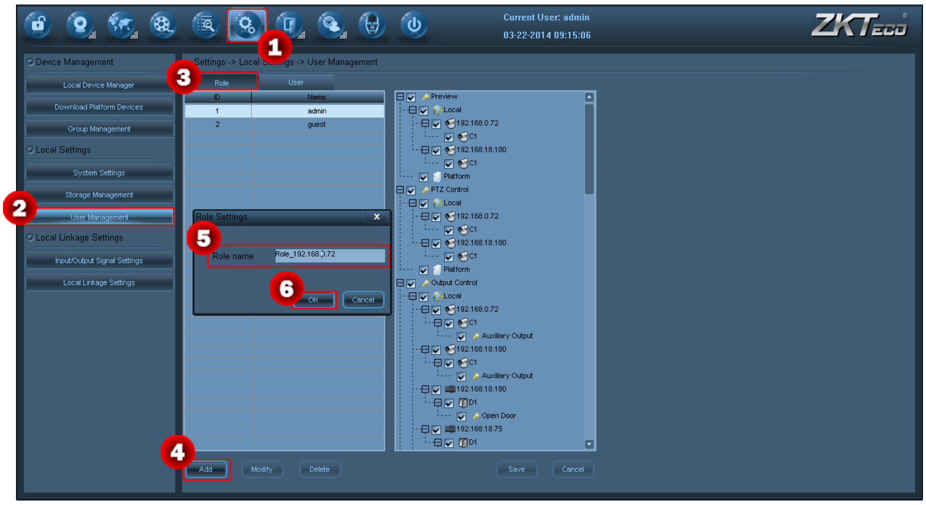
to start the video backup.

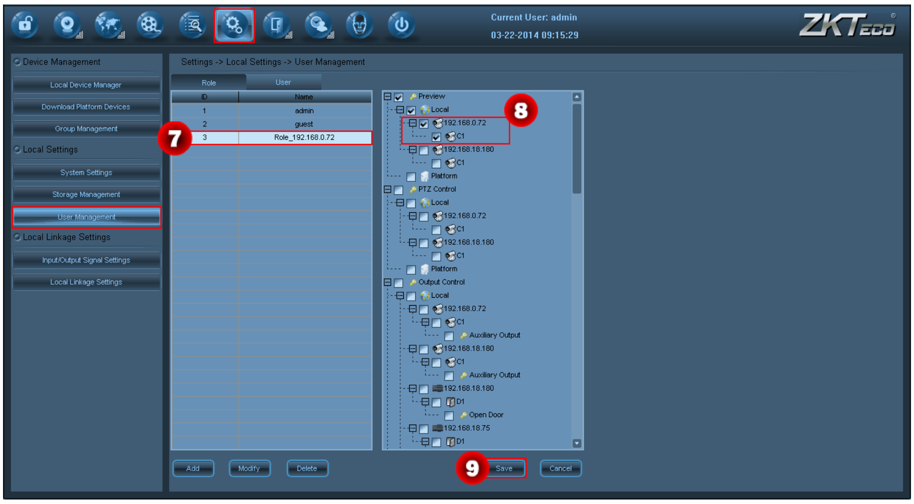
Notes: **(1)** The total files to be backed up should not be larger than 8G every time. **(2)** The path of backup should be neither the system disk, e.g. disk C, nor the video storage disk. **(3)** You can also access a camera through BROWSER and choose **Alarm**>**Linkage alarm** and select the **Save Video to Storage Card** option to back up the video to a storage card or select the **Save Video FTP Server** option to back up the video to an FTP server and a storage card concurrently. For details, see Alarm Linkage in the *User Manual--Using Browser for Video Surveillance* in the delivery-attached CD.



5.14 Create a New User

- **Add Role**





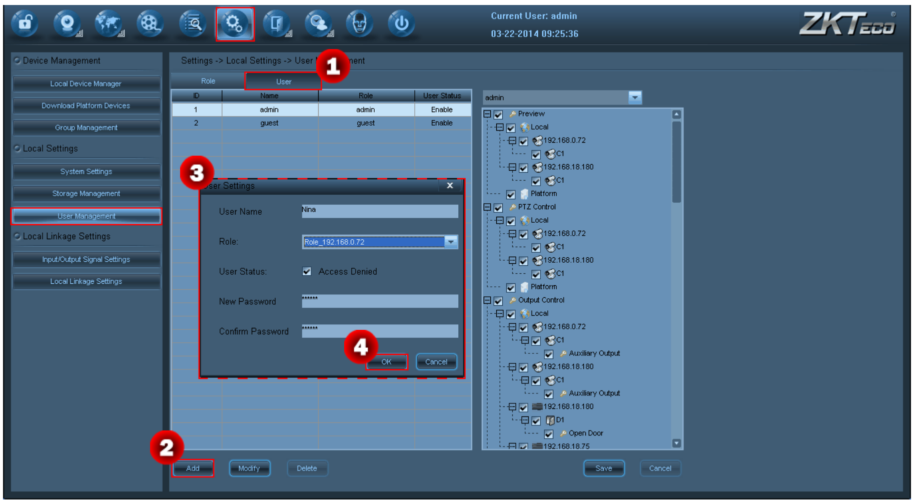
1. Choose **Settings** > **Local settings** > **User management**.

2. Click Add, set the **Role name**.

3. Configure the Preview of a role.

4. Click **Save** to save the setting.

- **Add User**

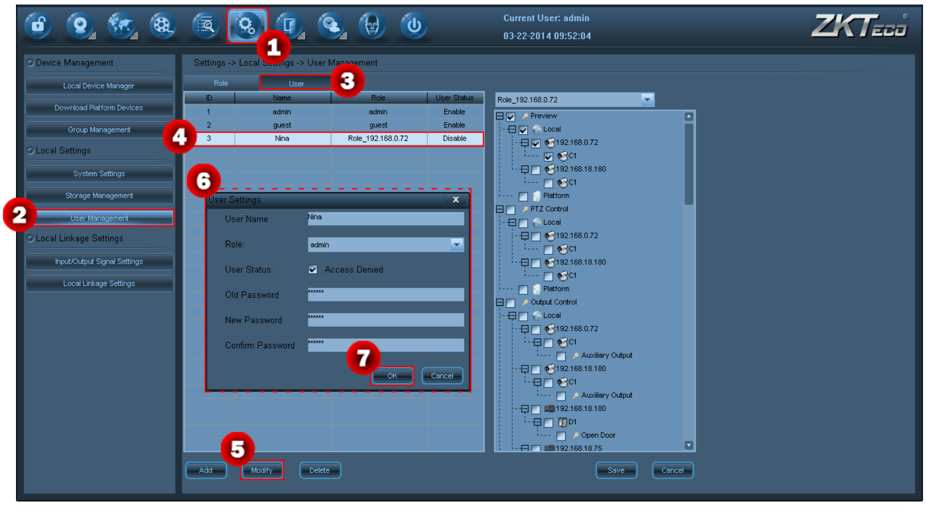


5. Switch to the **User** setting.

6. Click **Add** and set information such as the user name, role, and password.

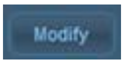
7. Click **OK**. Click **Save** to save the new user.

5.15 How to Modify User Info or User Permission

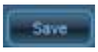


1. Enter the **Settings** > **Local Settings** > **User Management** interface, and shift to **User**.

2. Select the user to be modified from the user list.

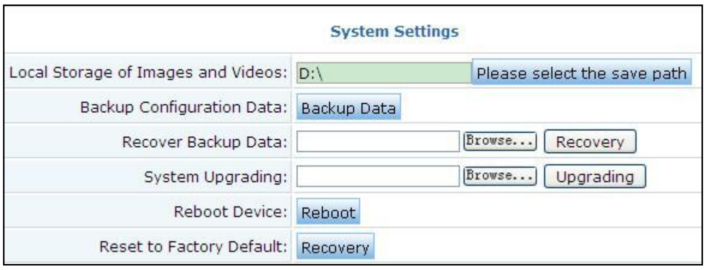
3. Click  to enter the modification interface.

4. Modify the user name, role, user status or password.

5. Click  and click  to save the modified user information.

5.16 Back Up and Recover Configuration Data

To back up or recover configuration data, access to a camera through browser and choose **System** > **System Settings** to perform system settings. For details, see System Settings in the *User Manual--Using Browser for Video Surveillance* in the delivery-attached CD.



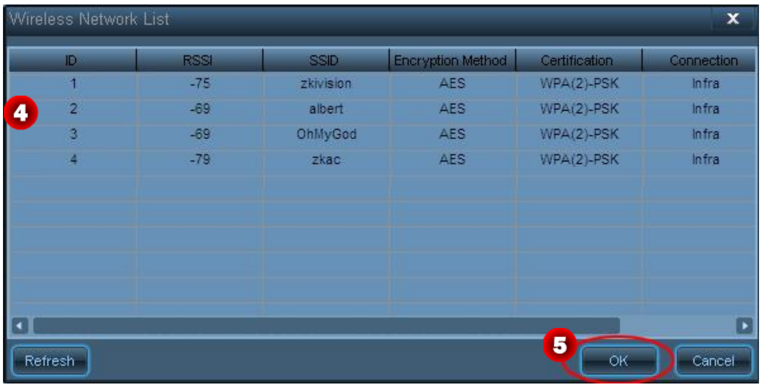
5.17 How to set Wi-Fi

Before enabling the wireless network, use network cable to connect the device with the network. Enter the **Setting**  > **Local Device Manager** > **Select Device** > **Click**  > **Network Settings** > **Wi-Fi Settings** submenu, and double-click a camera channel to connect it. Please configure Wi-Fi connection by following the steps as follows:

1. Start using Wi-Fi.

2. Click  to search available Wi-Fi.

3. Select a Wi-Fi network in the pop-up WI-FI list. All the parameters of the selected Wi-Fi will be automatically filled in each parameter bar (such as the access point mode and way of encryption).



4. If a key is set to the router, input the key.

5. Click 

to check if the Wi-Fi is connected normally.

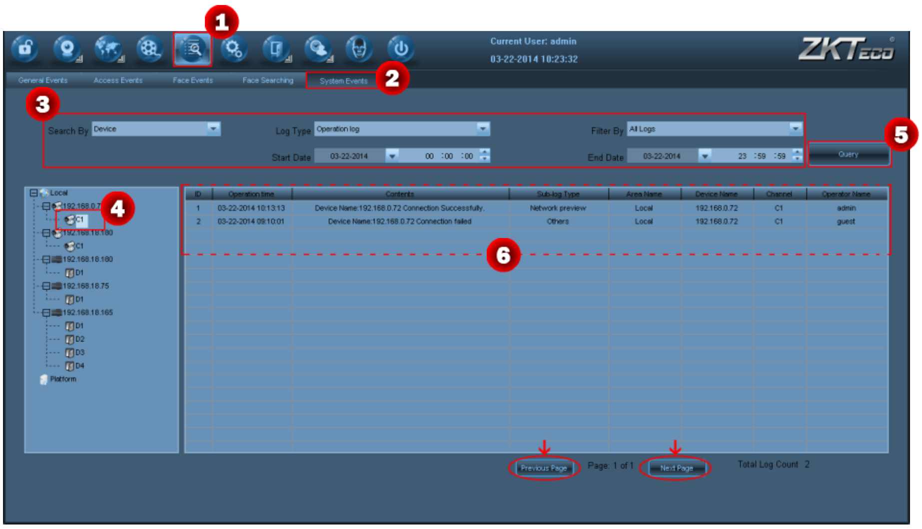
6. After successful connection, click 

to enable the settings.

7. Pull up the network cable, and restart the device.

8. Access the camera by the browser, and enter the **Settings** > **System** > **Device Info** interface, you can see the network connection type displayed as **Wireless Connection**.

5.18 Search for System Logs

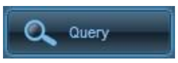


1. Click the  button.

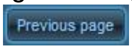
2. Select a data type.

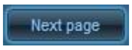
3. Select the log type, sub log type, start date and end date.

4. Select a camera channel or a user.

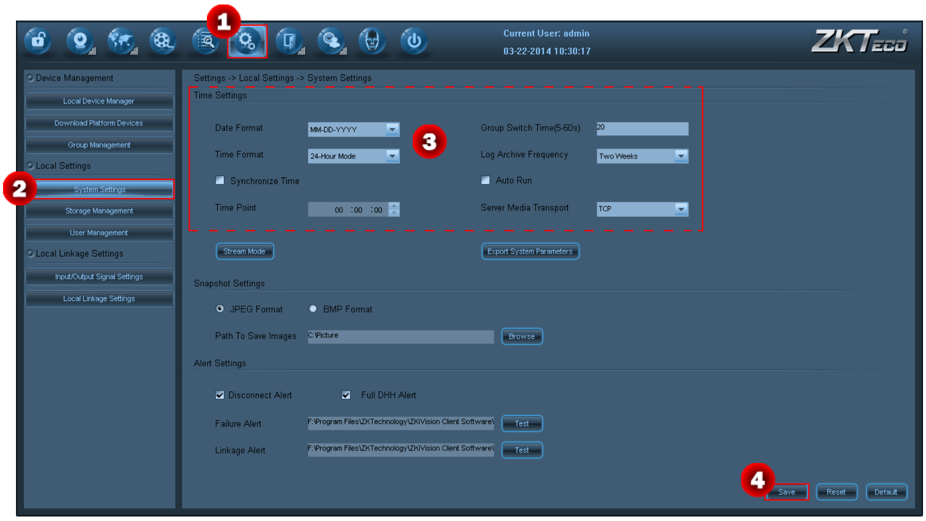
5. Click 

to query the logs of a specified type within the defined time period.

6. Query results are displayed in the log list. Drag the scroll bar on the rightmost side or at the bottom of the interface to view the details. Click 

or 

to view the query results on the previous or next page.



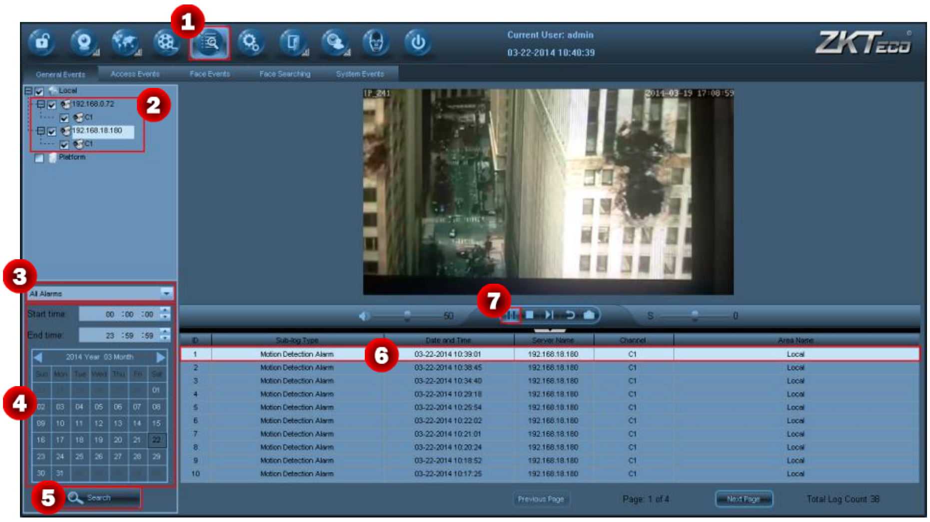
7. To modify the log saving time, date format, or time format, choose **Set**>**Local settings**>**System settings**.

8. In the **Time settings** pane, modify the log saving time, date format, or time format.

9. Click 

to save your settings.

5.19 Playback Associated Videos Through Alarm Logs

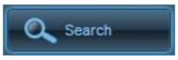


1. Click the  button > **Local Searching** > **General Events**.

2. Select the camera channels for query.

3. Select an alarm type.

4. Select a date.

5. Click  to find out the alarm logs on that date. Query results are be displayed in the log list.

6. Select one of the alarm logs in the log list.

7. Click  to play the associated videos of this alarm log.

Notes:

(1) You can select up to four channels of cameras to search logs when video records associated with alarm logs are to be replayed.

(2) Record replay is stopped when the current page is switched.

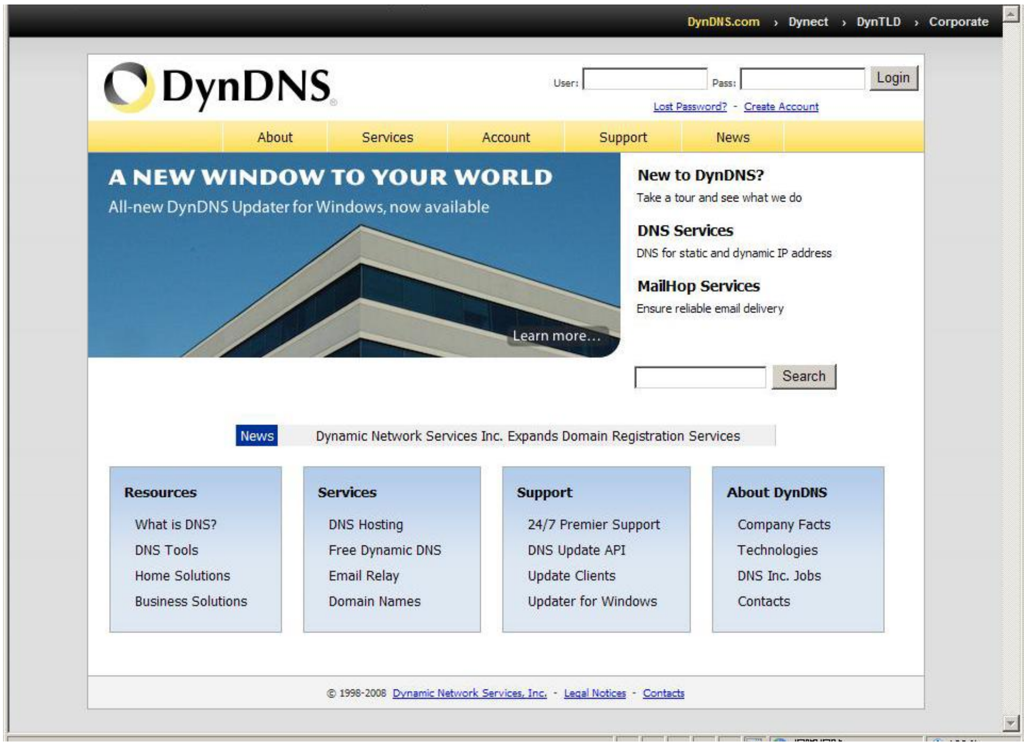
(3) The alarm logs in red text contain linkage records.

5.20 Apply for and Use a Dynamic Domain Name for Visiting IPC on Internet

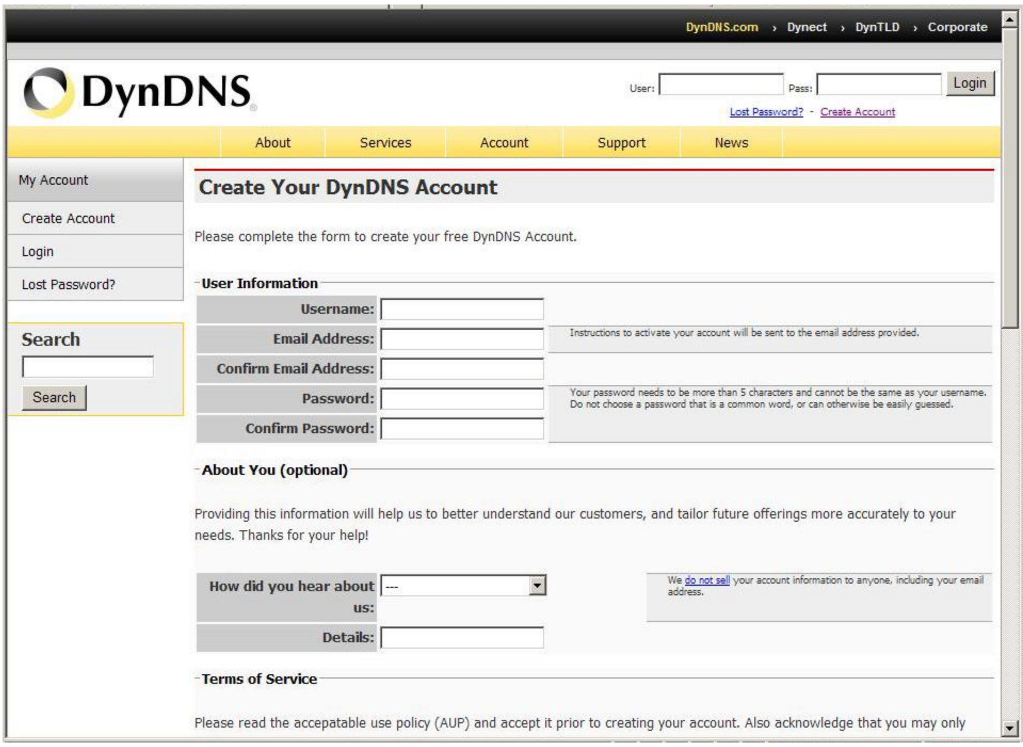
Currently our company's IPC supports the dynamic domain name by Dyndns.org, 3322.org and Dynddns.us. Before applying the dynamic domain name, register an email address to receive the verification email. For example, the application for a Dyndns dynamic domain names is in the following procedure:

1. Apply the dynamic domain username and host name for the camera.

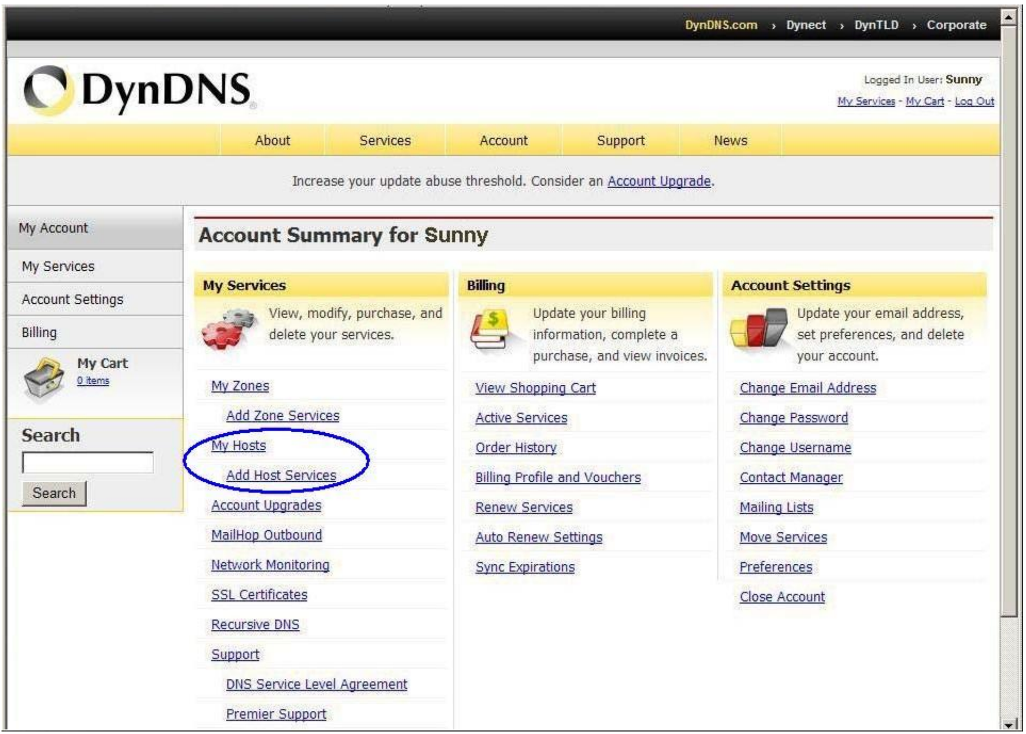
(1) Log in http://www.dyndns.org, click the **Create Account**.



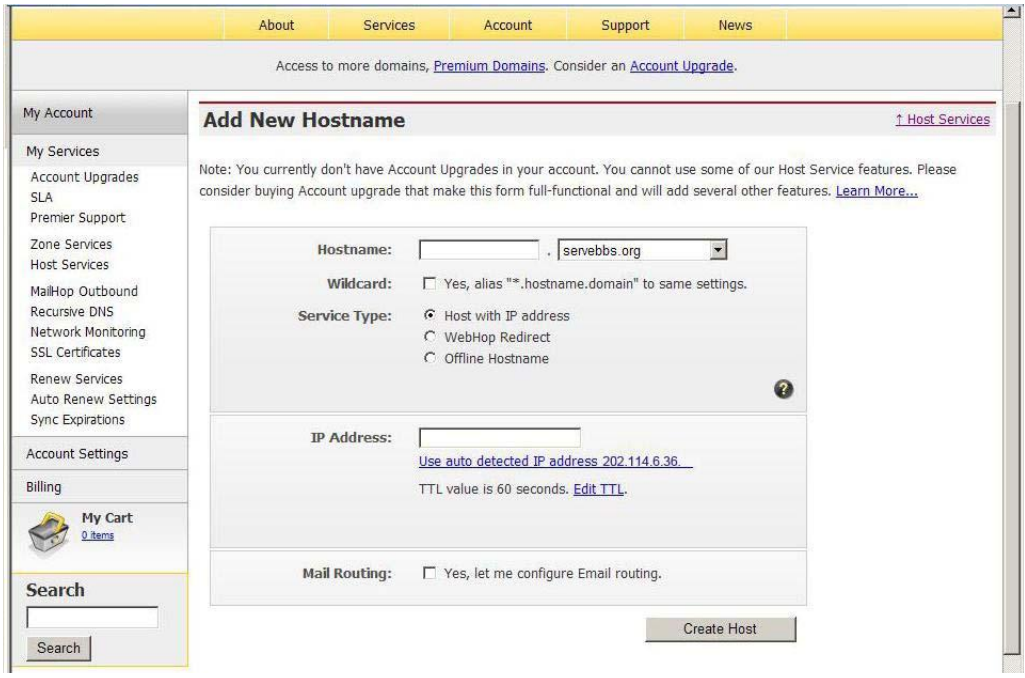
(2) Input all information and follow step by step with DynDNS.



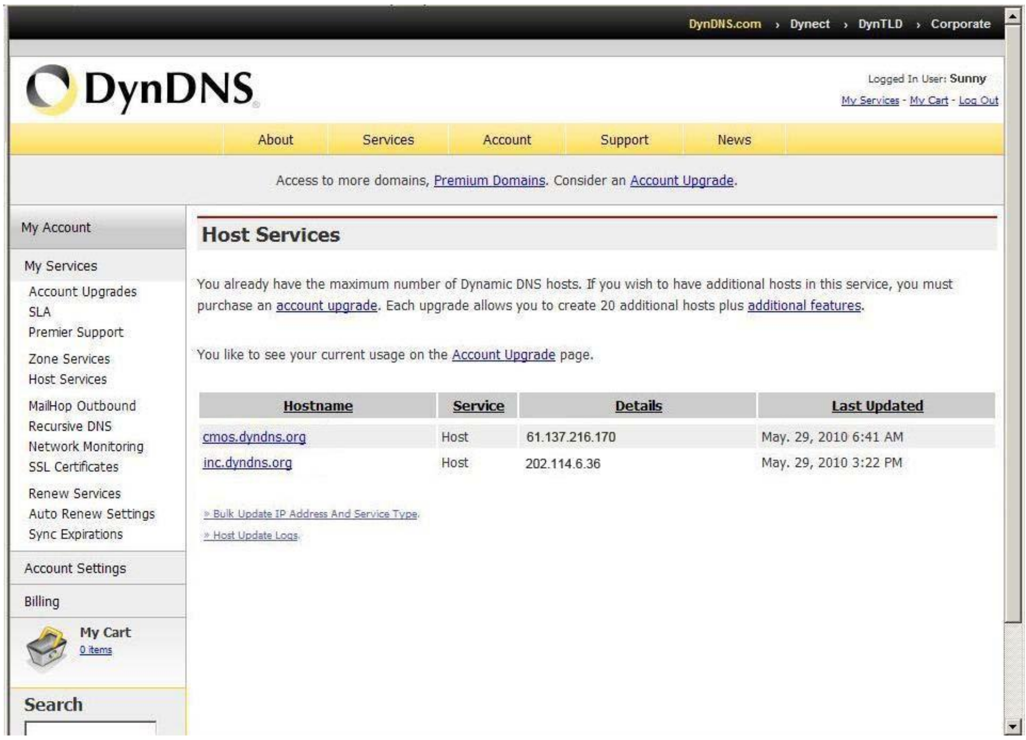
(3) Log in with new account and click **Account > My Hosts > Add Host Services**.



(4) Type domain in the Hostname field and select sub-domain.

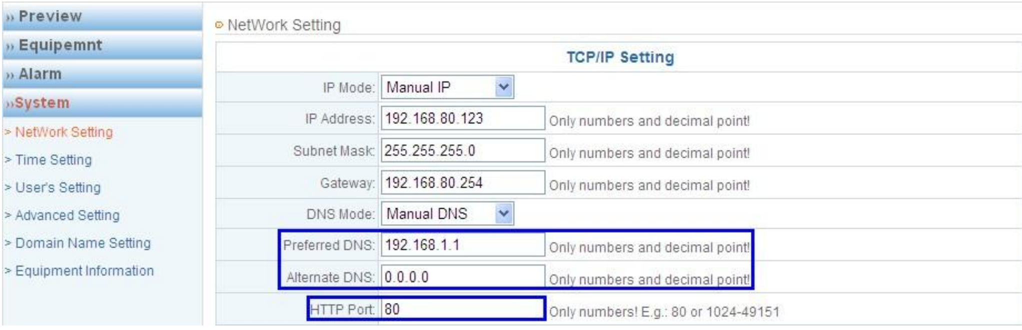


(5) After typing in information, check your DDNS service.

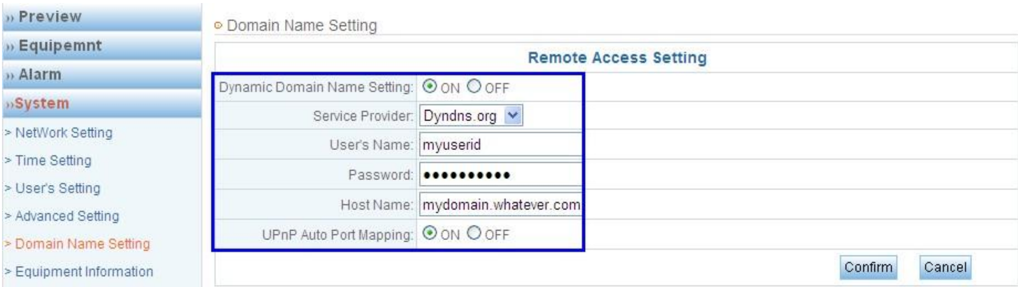


2. Visit and configure the camera through browser.

(1) Enter **System** > **Network Setting**, fill the correct LAN gateway and HTTP port. The DNS and port settings of the router are used here.



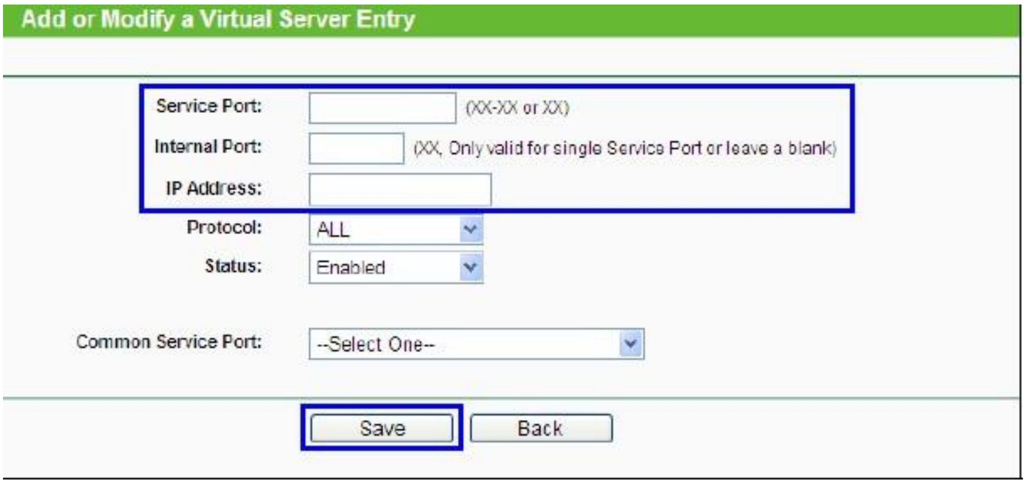
(2) Enter **System** > **Domain Name Setting**, and configure the domain name of the camera.



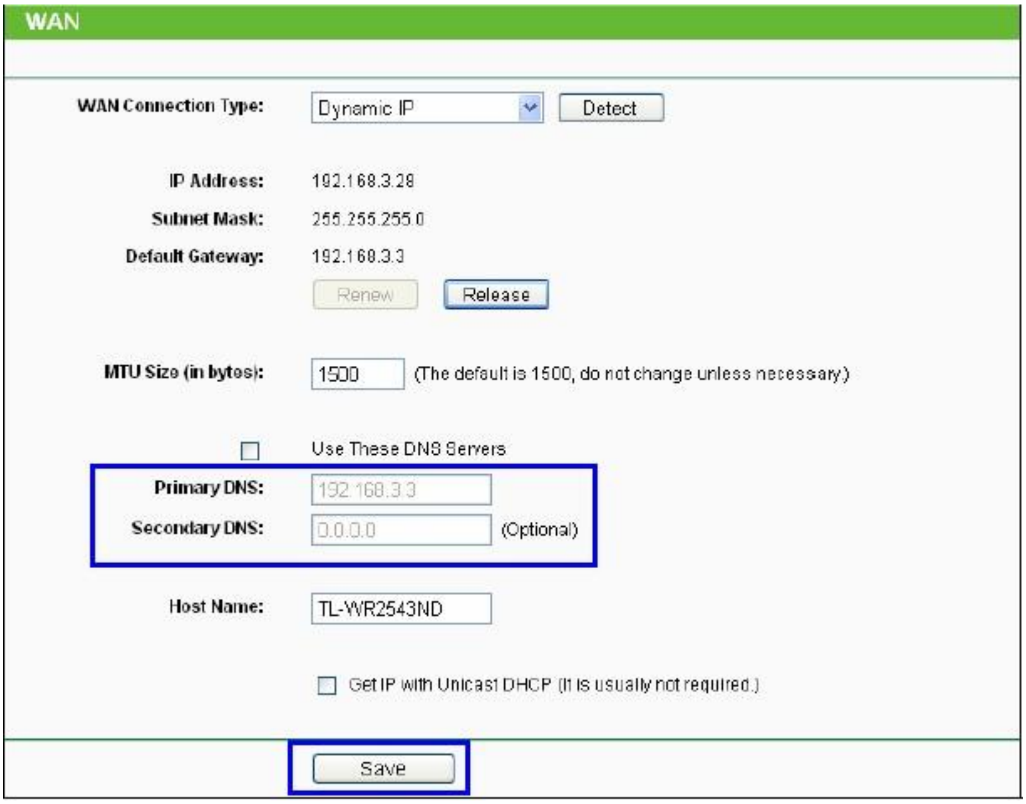
3. Login and configure the router

(1) Enter the **Dynamic DNS** setting of the router, set and enable the DDNS.

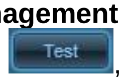
(2) Port Mapping: Enter **Forward Rules** > **Virtual Server Setting**, click **Add a new link**, add the IP address of the IPC in LAN and the corresponding port number, and enable the function. The port setting of the camera is used here.

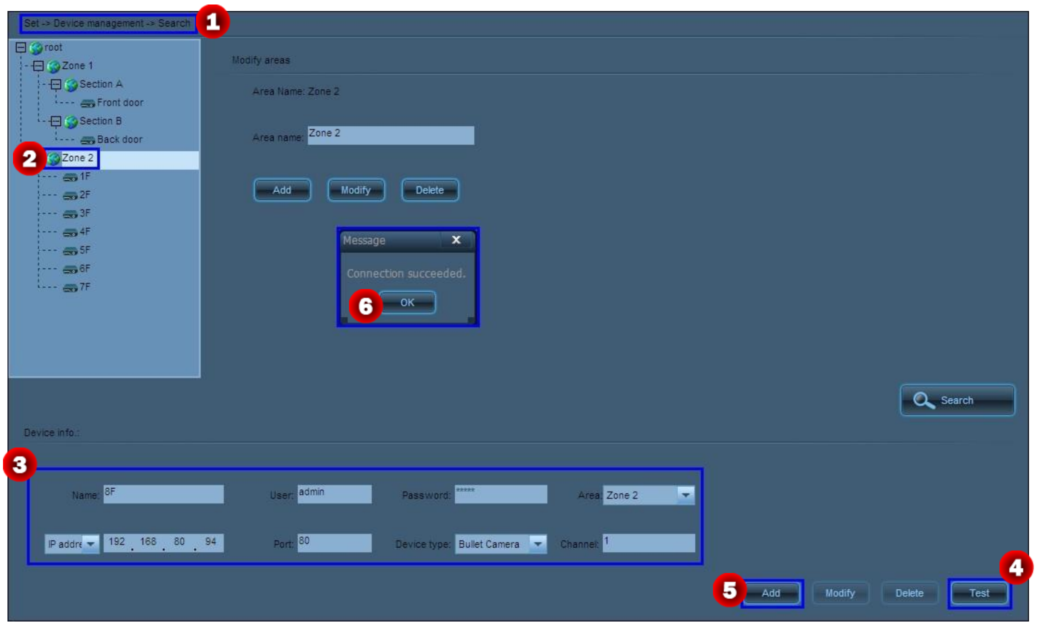


(3) Configure DNS address: Enter **Network Parameters** > **WAN Port Setting** and manually set the DNS address of the router. The DNS setting of the camera is used here.

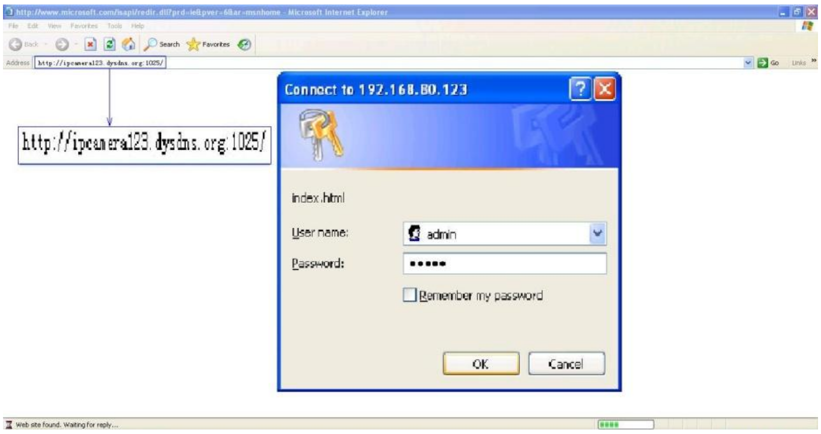


4. Use the domain name to check whether can visit the IP camera on internet.

Choose **Set** > **Device management** > **Search**. Click to choose a parent area, manually add this IP camera to the system. Click , then the "Connection succeeded" dialog window pops up.



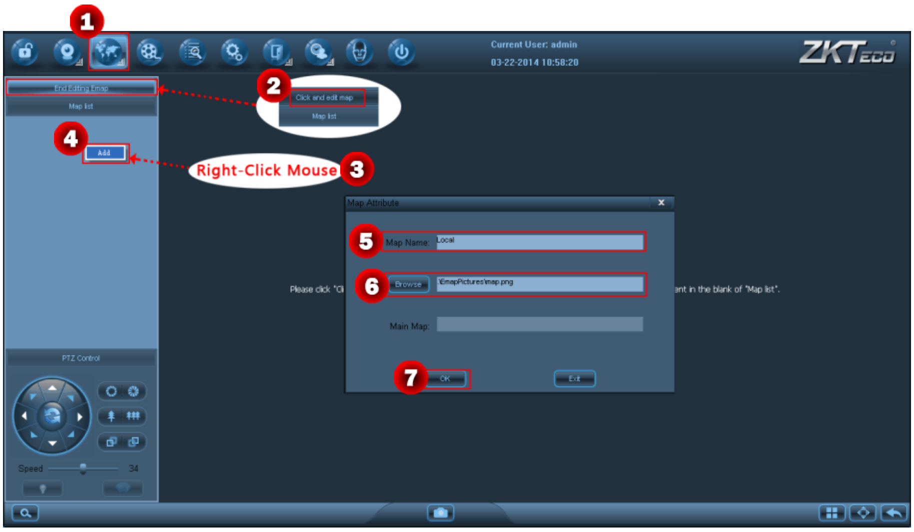
Or type in “http://domain name: port number” in the address bar of browser, e.g. “http://ipcamera123.dysdns.org:1025”, and log in the system to browse the videos of the IPC.

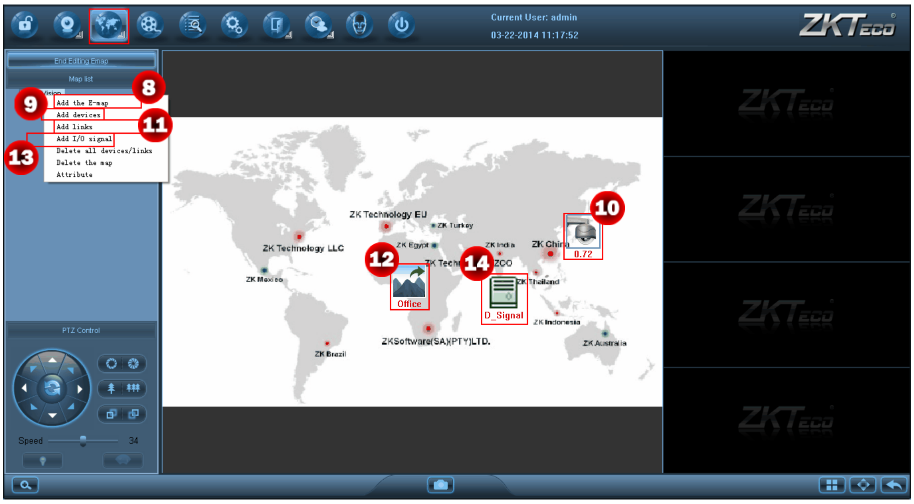


5.21 Set Audio and Video Parameters Appropriate for Your Network

Set audio and video parameters. See 4.6.1.2 Device Information Management > **Remote Settings** > **Audio/Video Setting**.

5.22 How to Set E-map





1. Access the **E-Map** tag page.

2. Click **Edit E-Map** to access the map editing page.

3. Click the right mouse button on the map list and choose **Add** to add e-maps.

4. If you want to add multi-level scenario maps, first choose the upper level map on the map list, and right click to choose **Add E-map.** Then set the attributes for the map that you want to add.

5. If you want to deploy a camera on the map, first choose the map on the map list, and right click to choose **Add devices**. Then set the attributes for the device that you want to add. Or you can right click the map on the map display window and choose **Add devices**.

6. Drag the mouse cursor to the device icon, press the left button and drag the device icon to where you want to place it.

7. If you want to add link on the map, first choose the map on the map list, and right click to choose **Add link**. Then set the attributes for the link that you want to add. Or you can right click the map on the map display window and choose **Add link**.

8. Drag the mouse cursor to the link icon, press the left button and drag the link icon to where you want to place it.

9. If you want to add input-output signals on the map, first choose the map on the map list, and right click to choose **Add I/O Signals**. Then set the attributes for the input-output signals that you want to add. Or you can right click the map on the map display window and choose **Add I/O Signals**.

10. Drag the mouse cursor to the signal icon, press the left button and drag the signal icon to where you want to place it.

11. Click **End Editing E-map** to exit map editing.

12. After the device is armed, when an external alarm signal comes in, the input signal icon will blink. After confirming the alarm on site, the security guard can right click the icon to confirm the alarm and then the icon will stop blinking.

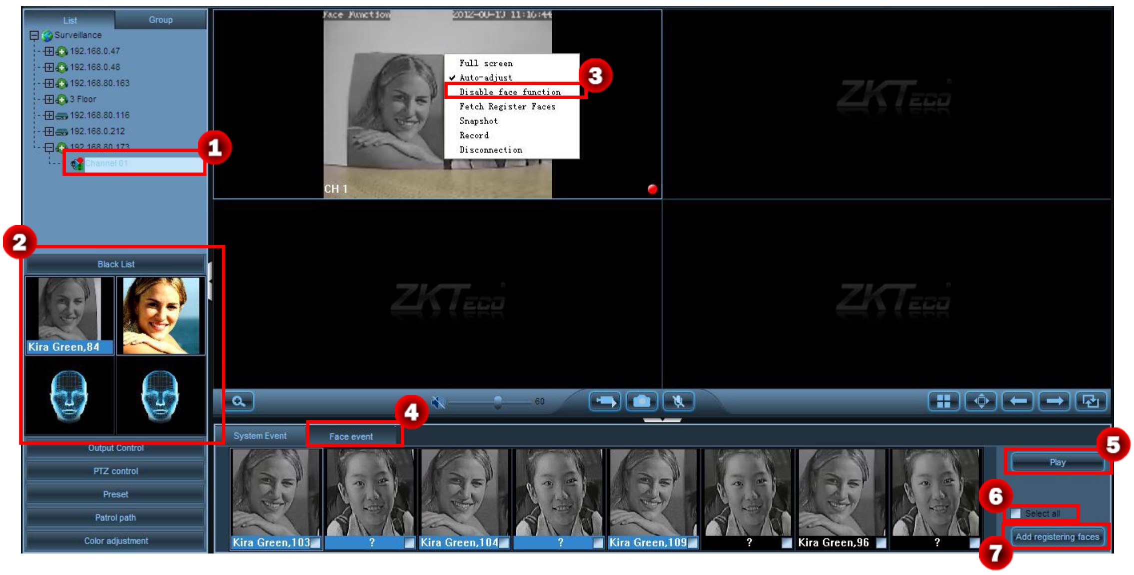
13. You can access the linked e-map by clicking the link icon on the map.

14. You can double-click the device icon or drag the icon to the video play window to play the video in real time.

15. You can control the output by double-clicking the output signal icon on the map.

Notes: **(1)** The alarm linkage of all signals will work only after the device (the camera) is armed. If the device is disarmed, it cannot produce alarm linkage. For arming the device, see 5.8 Enable Arming. **(2)** For setting signal alarm linkage, see 5.9 Set Alarm Linkage.

5.23 How to Set and Apply Face Function



1. You can register a user in two ways: collecting a photo on line and manually importing a picture.

- **Registering by Collecting a Photo online**

(1) Access the **Preview** page.

(2) Connect the camera for which the face identification function is to be enabled.

(3) Right click to choose **Enable Face Function** on the cell.

(4) Switch to the **Face Event** information panel.

(5) Click **Pause** to suspend the rolling display of the identification results on the left.

(6) Tick the face images to be registered, or tick **Select all** to select all the images on the face event information panel.

(7) Click **Add registering faces** to add the ticked images to the face template list on the face registration page.

(8) Access the **Face Function** > **Face Registration** page.

(9) Select the face image to be registered or click Real time face to select the real-time face image.

(10) Click to select one picture on the list as a reference picture for the currently registered user.

(11) Fill in the user information and set whether the user is a blacklist user or not.

(12) Click **Register** to add the user to the system, and the registration is finished.

- **Registering by Manually Importing a Picture**

(1) Access the **Face Function** > **Face Registration** page.

(2) On the face template list, tick to select the location to which you want to import the picture.

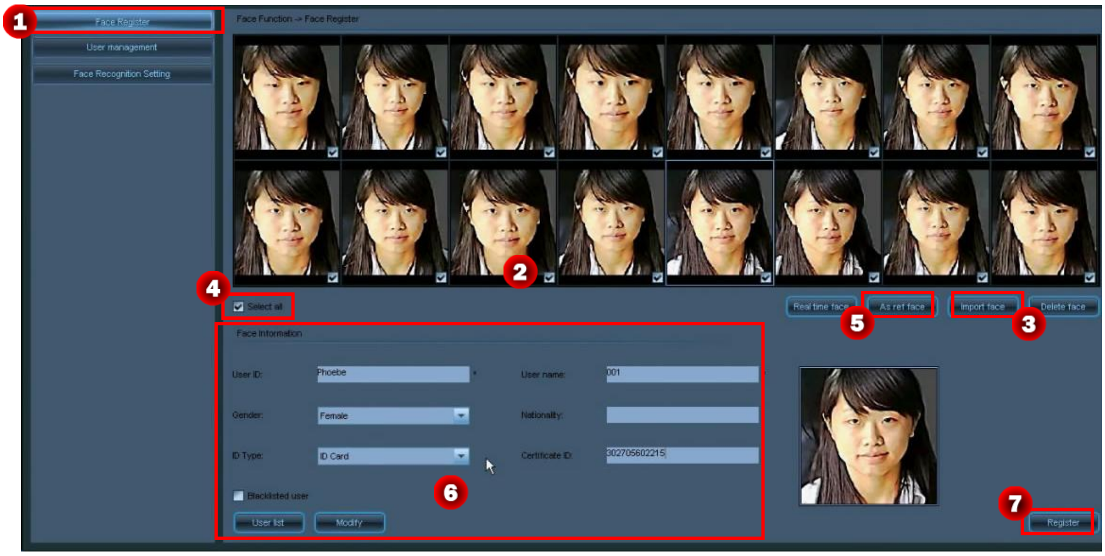
(3) Click **Import Face** to manually import face pictures.

(4) Tick the face images to be registered or tick **Select all** to select all the pictures on the list.

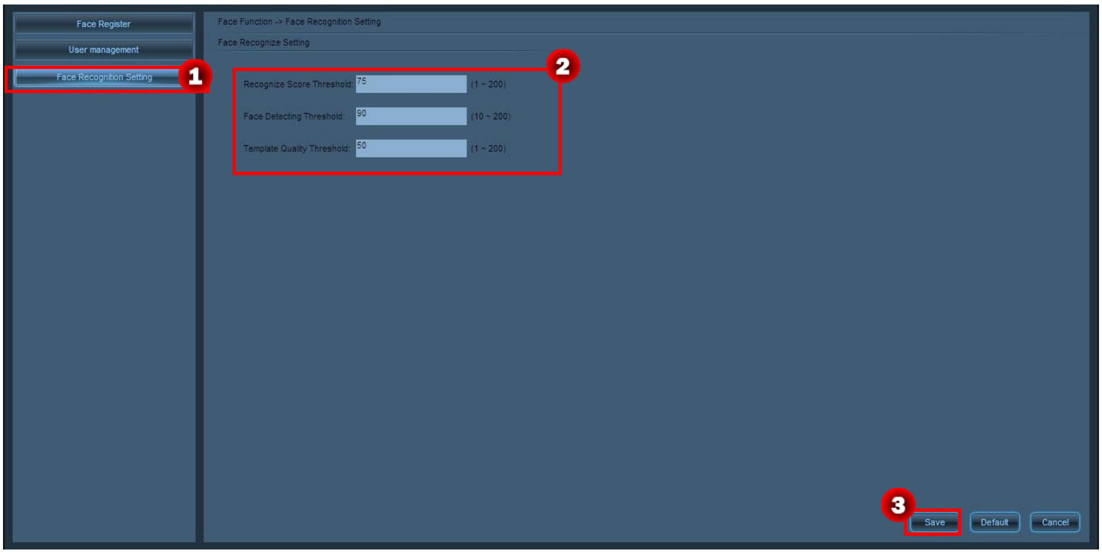
(5) Click to select one picture on the list as a reference picture for the currently registered user.

(6) Fill in the user information and set whether the user is a blacklist user or not.

(7) Click **Register** to add the user to the system, and the registration is finished.



2. Set face identification parameters.



(1) Access the **Face Identification** > **Parameter Settings** page.

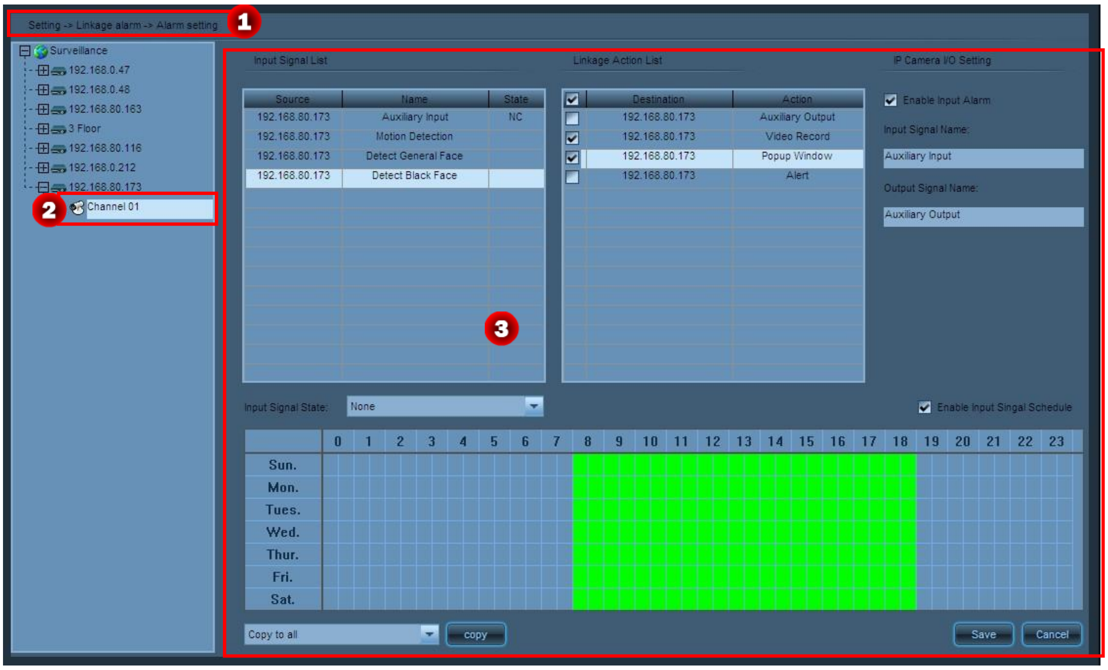
(2) Set face identification parameters. For description of parameters, see 4.8.3 Parameter Setting.

3. Set face event alarm linkage.

(1) Access the **Setup** > **Alarm Settings** page.

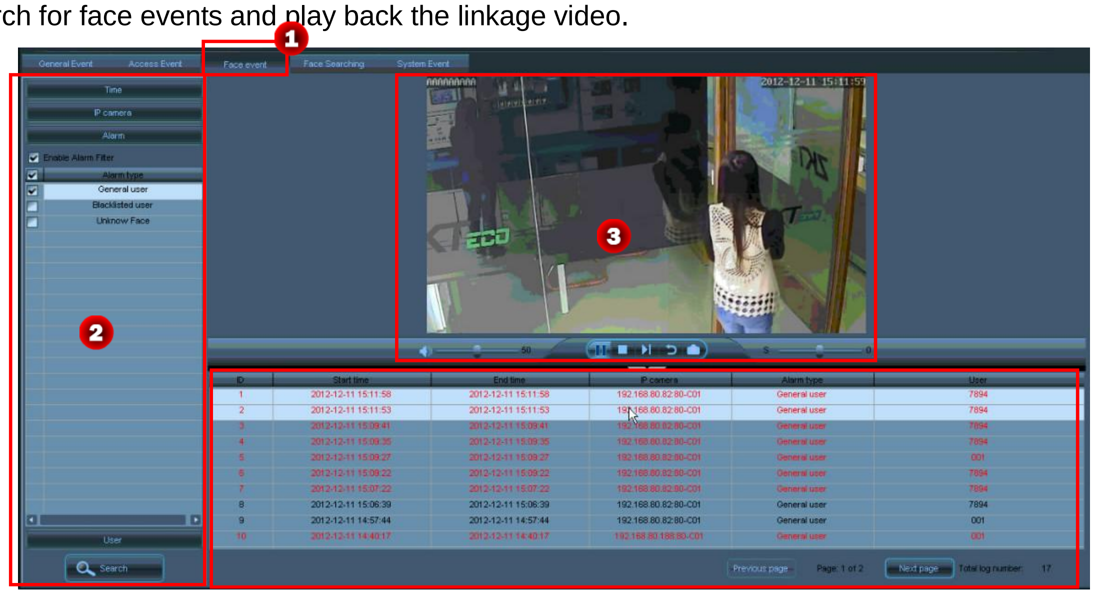
(2) Double-click the camera for which face identification function is enabled. When the connection is successful, set alarm linkage items for face events. For details, see 5.9 Set Alarm Linkage.

(3) Click Preview to start arming the device. For details, see 5.8 Enable Arming.



4. You can implement video surveillance on the **Preview** page. If the system identifies a face, the system will perform alarm linkage actions according to the alarm linkage settings; if it identifies a blacklist user, the user will be displayed on the **Blacklist**.

5. Search for face events and play back the linkage video.



(1) Access the **Event Query** > **Face Events** page.

(2) Set query conditions, click **Search,** and the search results will be displayed on the log list.

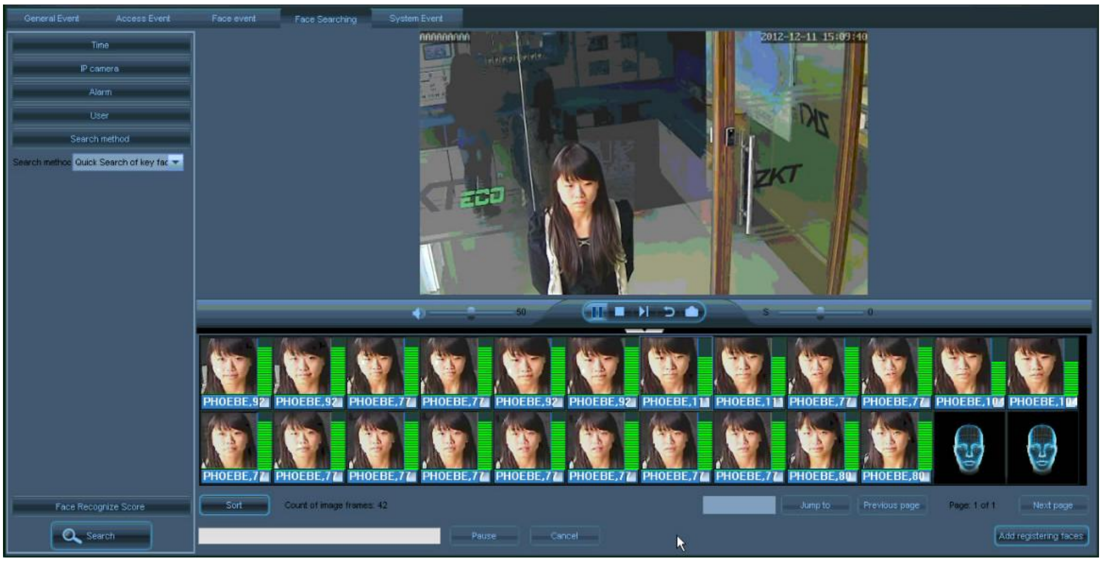
(3) View the log, double-click the log with associated video (font in red), and the associated video will be played in the playback window.

6. You can also search for and play back face videos.

(1) Choose **Event Search** > **Face Searching**.

(2) Specify query conditions and click **Search**.

(3) Double-click a face image that is searched out. Then, the playback window plays the video associated with the face image.

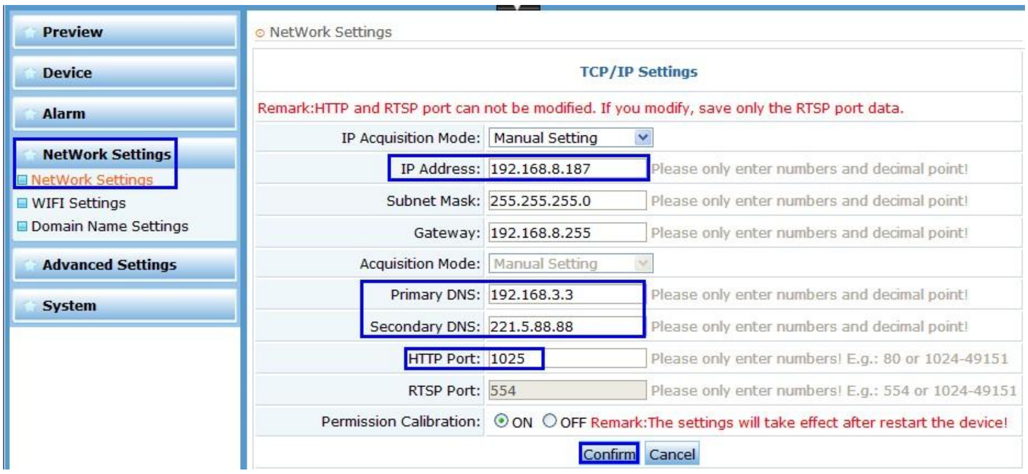


Note: The system will extract a face template from the ticked picture on the template list and use it as the face template for the currently registered user. When you register a user, it is recommended that you tick a number of face images for this user to improve the accuracy of the face template.

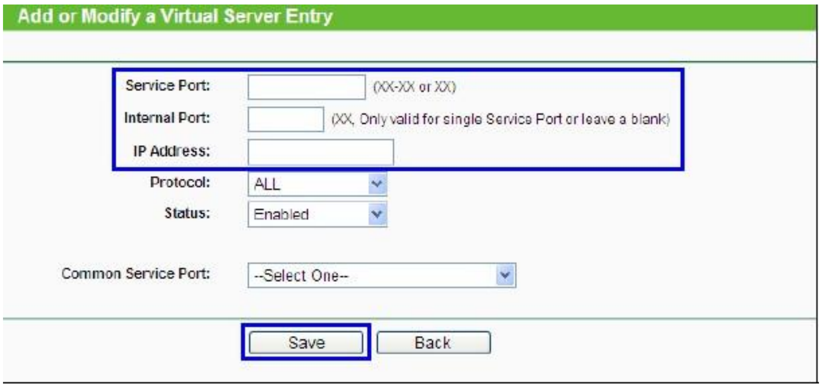
5.24 How to Use Vendors DDNS for Visiting Surveillance Device on Internet

Notes: **(1)** Ensure that the router can access the Internet before performing port mapping. For details about how to configure Internet access for the router, see the user manual of the router. **(2)** The default port used by the router is port 80. Use ports ranging from 1024 to 49151 for port mapping.

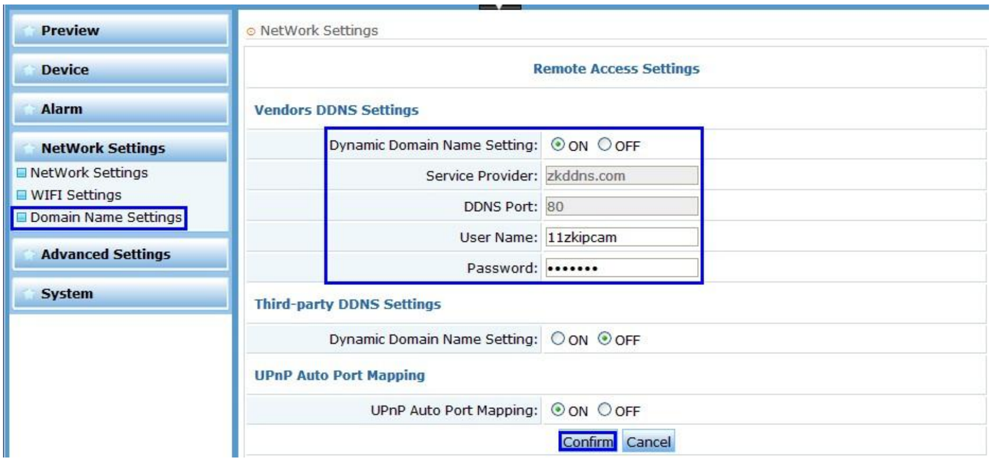
Use a browser to access a device. Open the **Network Settings** page. Set the DNS address of the device (this DNS address must be consistent with the one set on the router) and the HTTP port.



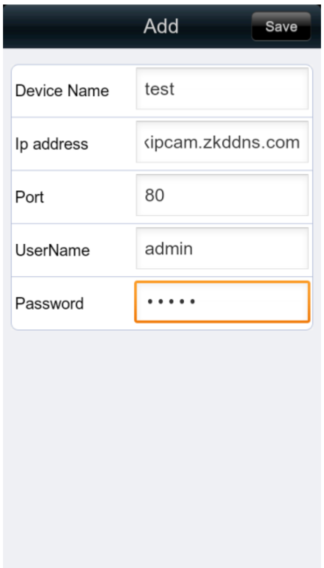
Use the browser to access the router. Open the **Forward Rules**>**Virtual Server Setting** page. Click **Add a new link**. Add the IP address of the device in a LAN and the corresponding service port, and enable this function. The settings here must be consistent with the settings of the IP address and HTTP port of the device.



Use the browser to access the device. Open the **Network Settings**>**Domain Name Settings** page. Set the Vendors DDNS.



Use the dynamic domain name to access the device. (e.g.: access the device by a mobile phone)



6 FAQs

6.1 No Image at Preview

Possible causes:

1. Incorrect device information such as the user name and password.

2. MAC address conflicts between the camera and other devices.

3. Too many users connected to the camera.

4. Camera hardware failure.

Solutions:

1. Choose **Settings** > **Local Device manager**>**Search**. Correct the device information such as the user name and password. Click **Test** until the connection succeeds.

2. Choose **Settings** > **Local Device manager** >**Search**. Click 

and then 

. On the search list, check whether the camera has a MAC address that conflicts with that other devices. If such a conflict exists, consult professionals or our technical support team.

3. Access to the camera through browser. Choose **System**>**Device information** to view the number of connected videos (a camera can support a maximum of four users to browse main stream videos at the same time or ten users to browse secondary stream videos at the same time). When the maximum number of video connections is reached, wait for a few minutes until the number falls below the maximum, and then try connecting again. After these operations, you can properly play the videos.

4. Contact our commercial personnel or technical support team.

6.2 No Audio at Preview

Possible causes:

1. No external audio collecting devices.

2. Incorrect audio/video parameter settings.

Solutions:

1. Connect an audio collecting device to the camera before connecting the camera to your PC to make sure that you can properly hear the audio.

2. Choose **Settings** > **Remote settings** > **Audio/Video Settings**. On the **Audio/Video Settings** interface, set Audio collection to Open.

6.3 No Audio in Playback

Possible cause: The audio collection function is disabled when you videotape the images.

6.4 Failure to Enable Manual Recording

Possible causes:

1. Equipment disconnected

2. Disk space insufficient

Solutions:

1. Choose **Settings** > **Local Device manager** > **Search**. Click **Test** until the connection succeeds.

2. Choose **Settings** >**Local settings** > **Storage management**. Tick off **Disk full cover**. Then the video files of the earliest date will be deleted when all disk space is less than the preset reclaimable space. Or you can enter the video storage path and manually delete unwanted videos to free up the disk space.

6.5 Failure to Disable Videotaping at Preview

Possible causes:

1. The device performs scheduled videotaping within a specified period.

2. The device performs linkage alarm videotaping within a specified period.

6.6 Pan-Tilt Abnormality

Abnormal conditions:

1. Lighting out of order.

2. Wiper out of order.

3. Pan-tilt out of order.

(1) The device has no built-in pan-tilt.

(2) The device cannot work with a pan-tilt.

Solutions:

1. Check whether any external light fixtures are connected. This function applies when there are external fixtures.

2. Check whether any external wipers are connected. This function applies when there are external wipers.

3. **(1)** An external pan-tilt is required. **(2)** Choose **Settings** > **Remote Settings** > **PTZ Parameter Settings**. Set PTZ parameters such as the address, baud rate, and stop bit on the **PTZ Parameter Settings** interface. Ensure that these parameter settings are consistent with the PTZ settings.

6.7 Failure to Implement Audio Intercom

Possible cause: The device has no external audio input devices or no headsets or microphones are connected to the PC.

Solution: Connect an external audio input device to the device and connect a microphone headset to the PC.

6.8 Failure to Play Back Videos Displayed on the Timeline Panel After a Video Search

Possible cause: The video files are missing or the user has manually deleted the video files within a specified period.

6.9 Failure to Search for Video Files

Possible cause: The video file for this time period has been deleted or has been overwritten by circulating video recording.

6.10 Failure to Set the Motion Detection Area

Possible causes:

1. When **Resolution** is set to **QCIF**, the system does not respond your request for motion detection area settings.

2. If you log in to the front-end device with a non-admin account, the system does not respond your request for motion detection area settings.

Solutions:

1. Choose **Settings** > **Remote Settings** > **Audio/Video Settings**. In the Video parameters settings pane, set the resolutions on the Main stream and Secondary stream tab pages separately.

2. Switch to log in to the front-end device as a super user, and then set the motion detection area.

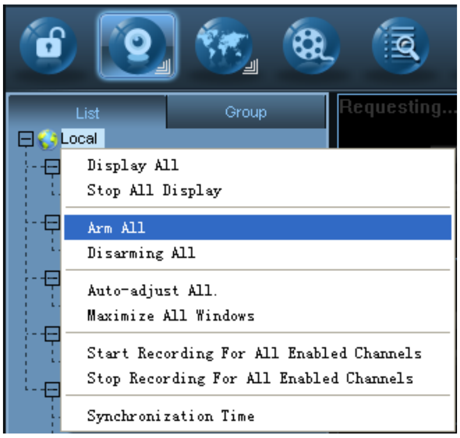
6.11 Failure to Achieve Alarm Linkage

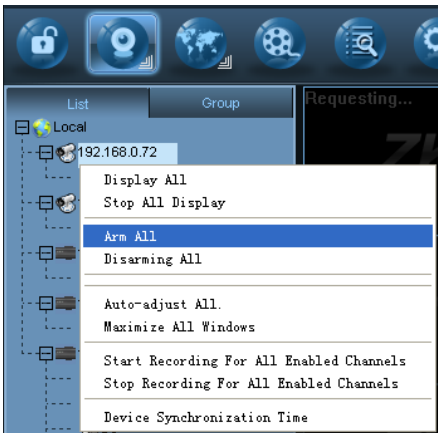
Possible cause: The **Arming** function is not enabled.

Solutions:

1. On the equipment list of the preview interface, right-click a desired area and choose **All arming** from the shortcut menu. Then the guard function is enabled for all devices in this area.

2. On the equipment list of the preview interface, right-click a desired device and choose **Arming** from the shortcut menu. Then the guard function is enabled for this device in this area.





6.12 Failure to Display the Alarm Window After Enabling Arming

Possible causes:

1. The **Pop up video window** option is not selected.

2. No alarm signals are detected.

3. When **Resolution** is set to **QCIF**, the system does not support motion detection alarms.

4. If you log in to the system as a non-admin user (namely, a super user), the system does not support motion detection alarms.

Solutions:

1. Choose **Settings** > **Local Linkage Settings**. In the Alarm linkage pane, select **Pop up Window**.

2. Check the motion detection area and input alarm settings. For relevant motion detection settings, see 5.7 Set Motion Detection. For relevant external alarm inputs, see 5.9 Set Alarm Linkage.

3. Choose Set > Remote settings > A&V parameter settings. In the Video parameters settings pane, set the resolutions on the Main stream and Secondary stream tab pages separately.

4. Switch to log in to the system as a super user.

6.13 Video Image Exception at Preview

Possible causes:

1. Incorrect video parameter settings

2. Unstable camera connection

Solutions:

1. Choose **Settings** > **Remote settings** > **Audio/Video Settings**. In the **Audio/Video Settings** pane, set parameters on the **Main stream** and **Secondary stream** tab pages according to actual bandwidth.

2. Check to ensure that the camera is properly connected.

6.14 Incorrect System Time

Solution: Choose **Settings** > **Local settings** > **System settings**. Tick off **Auto-calibration time** and set the calibration time. When the calibration time arrives, the system automatically calibrates the time.

6.15 Audio Settings

To enable the audio function, perform the following steps:

Access **Audio/Video Settings**, set **Sub-stream** and set **Stream Audio** to **Enable** in the **Audio Settings** area, and click **Apply**. Then, restart the camera. You can restart the camera after the modification on the client or web server.

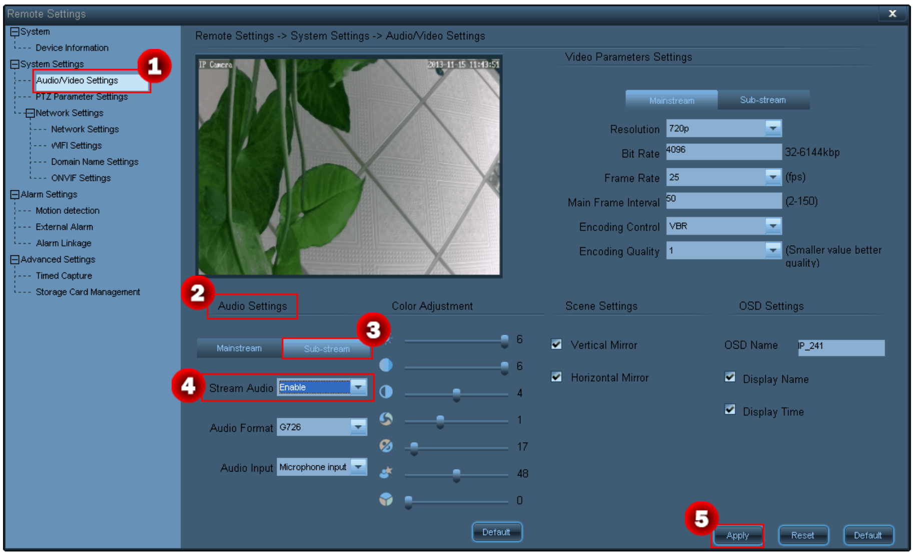
1. Click Settings  > **Local Device Manager**, select device in the **Local Device List**, and then click 

button to enter the **Remote Settings** interface.

2. Shift to **Audio/Video Settings** > **Sub-stream** > **Stream Audio** > **Enable** the **Stream Audio** > Click 

button to apply settings.

3. Restart the IP camera.



2. Enable the audio icon.

6.16 Failure to Enable Linkage Recording and Manual Recording

If no free disk space is available, linkage recording and manual recording cannot be enabled.

6.17 Failure to Import Face Pictures

If the face dongle is not inserted, face pictures cannot be imported.

6.18 Configuration Problem of Motion Detection Linkage

After motion detection linkage is configured, the main window cannot display pop-up windows, but the motion detection linkage configuration window can display pop-up windows.

Possible cause: Motion detection is not implemented when **Sub-stream** is set for the IPC. Therefore, motion detection is unavailable when the split screen of the preview window is not magnified (the record stream is set to **Sub-stream**), and therefore linkage is not implemented.

Solution: Access the storage window and set the record stream to **Main stream**. After that, linkage is normal.

6.19 ZKiVision Client Cannot Search Devices but ZKSearch Can Search Devices

The ZKiVision Client cannot search devices, but the ZKSearch can search devices.

The problem is caused by the existence of multiple network connections on the PC. Perform the following steps to solve the problem:

1. Check whether the PC has multiple network connections. Keep only one network connection if possible and make the IPC and PC be located in a single network segment of the same local area network (the IPC and PC can be connected directly).

2. Check whether the firewall is disabled or whether the ZKiVision Client Software is added to the allowed program list of the firewall.

3. If the problem persists, disable any running security or antivirus software.

If the ZKiVision Client still cannot search devices, send the **CODETRACE** directory in the installation directory to us and specify the specific time (in the format of year-month-day hour:minute).

(**Remarks**: To find the **CODETRACE** directory, right-click the ZKiVision Client icon on the desktop, select the installation directory of the software and find the **CODETRACE** directory among the displayed folders.)

6.20 Other Common Problems and Important Notes

- **New devices cannot be displayed because some antivirus or security software is running.**
- **The software stops responding occasionally after face identification is enabled (the dongle is inserted for v4.2).**

Possible cause: The resolution of the PC is too low.

- **The ZKiVision Server cannot be started.**

Possible causes and solutions:

(1) Check whether the IP address of the ZKiVision Server is modified. If yes, run ZKiVision Server Config again. If the problem persists, check whether the IP address is used by other programs.

(2) Restart the ZKiVision Server (the ZKiVision Server may fail to be started automatically after the operating system is started).

(3) Choose **Start** > **All Programs** > **ZKTechnology** > **ZKiVision Serve**r > **ZKiVision Server Config.** *The ZKiVision Server Config* window is displayed. Check whether the server IP address and various ports are correct and not used by other programs on the PC. Click **OK** and reconfigure the server.
(**Note**: If the operating system is a Windows 7 operating system enabled with the user right function, right-click **ZKiVision Server Config** and select **Run as administrator**.)

(4) Right-click the My Computer icon on the desktop and select Manage, and click Services and Applications in the left pane. Double-click Services in the right pane and check whether the CMS MySQL service is enabled. If the MySQL service is not enabled, the ZKiVision Server cannot be started.
(MySQL may fail to be installed, causing a failure to start CMS MySQL. In this case, unload and then reinstall MySQL.)

(5) Check whether the ports of the CMS server are used by other programs, causing a failure to start the CMS server. If yes, modify the listening port. Three continuous unoccupied ports (starting from the listening port) are required to start the CMS server. To check the use of PC ports, click **Start** > **Run** and enter **cmd**, and then enter **netstat -ano**. The output shows the use of various PC ports. The PID column

shows the IDs of corresponding processes. Access Task Manager (press **Ctrl+Alt+Del**), choose **View** > **Select Columns**, and **select PID**.

(6) The ZKiVision Server is intercepted by the firewall, security software, or Windows 7 user right function.

- **No face is detected after face identification is enabled.**

Possible cause: There are many users, causing a failure to obtain the primary stream.

All devices are in recording state, but the video records of some channels cannot be played.

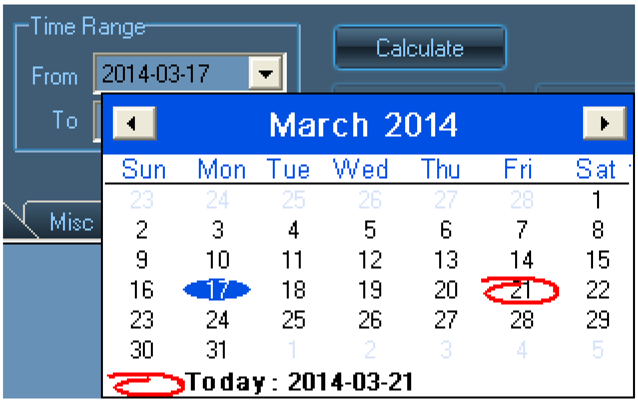
Possible cause: The problem may be related to the network adapter of the server. The transmission rate of 100 Mbit/s only supports the data transmission of limited devices.

Many video screens of the preview window encounter delay. Possible cause: Sub-stream is set to 640*352 for cameras by default. Change it to 320*176.

7 Appendices

7.1 Set Date

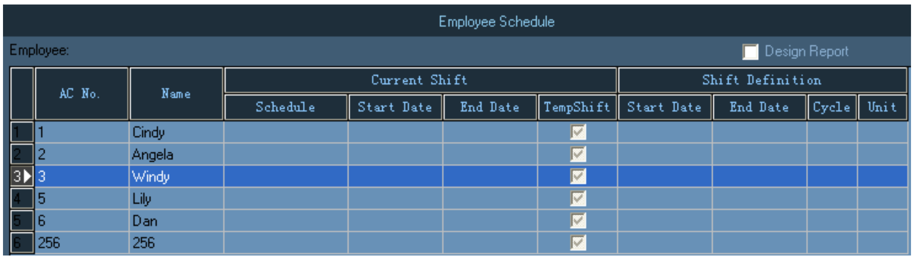
In the box of Date click "" button to select the date, and in the box of Time click "" button to select the time or directly change the time. In the drop-down box of Date, click "" or "" button to move the date one month upward or downward:



Click the year number to change the year directly, or click "" button to move the date one year upward or downward. Click on the date you want to select it.

7.2 Select Employee

The option box of Employee is like this:

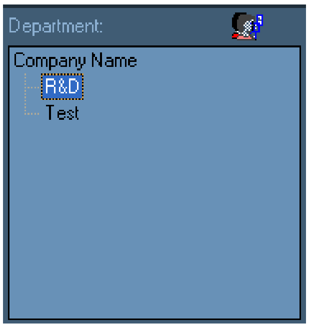


Move the mouse to the row the employee to select is in, left-click the mouse, and this row will turn blue.

To select more than one employee, hold down "**Ctrl**" key to select.

7.3 Select Department

The option box of Department is like this:



With the mouse left-click the department name, the department name will turn blue. It shows chooses successfully.

7.4 Select Employee in Department

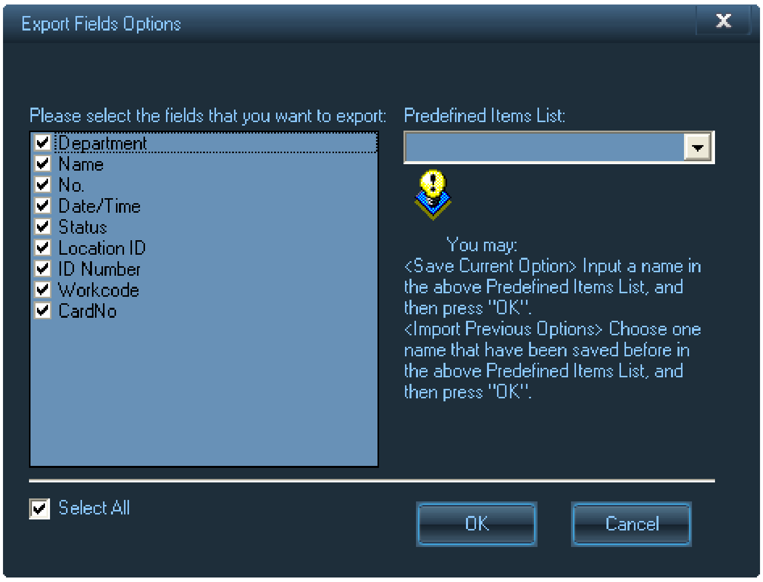
Click the department box to extend the tree-type framework, and select the department where the employee is, then click the employee box to extend the drop-down list box and select the employee.

7.5 Export Data

Following take **Attendance Record** as example, to describe **Export Data** function:

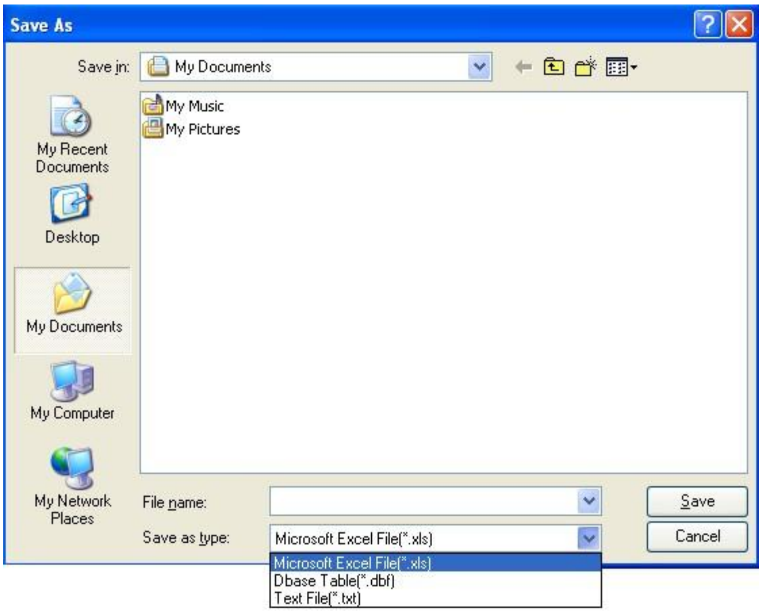
As shown in the above picture, click 

button to popup the following window:



Predefined Item List: The current definition of your choice will be a name, when the next time export will be allowed to directly select and save name but not need to choose the field to export in the left box.

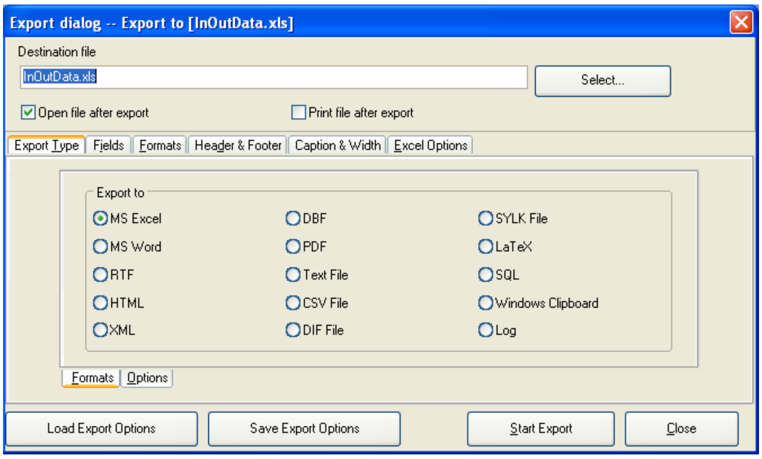
Put tick in font of the fields to export. If next time you want to select the same fields to export data, you can input an item name in the box of Predefined Item List, and click "**OK**" to save the selected fields in this item. If you want to call your previous choices, select a name saved in the box of Predefined Item List, and click "**OK**" to enter the following window:



Enter a filename for this file to save in the column of Filename, select the type to save this file, and then you will export the selected data to this file. You can save a file in three formats: Excel files (Microsoft Excel File (*.xls), DBF formed database files, right justified text files.

7.6 Advanced Export

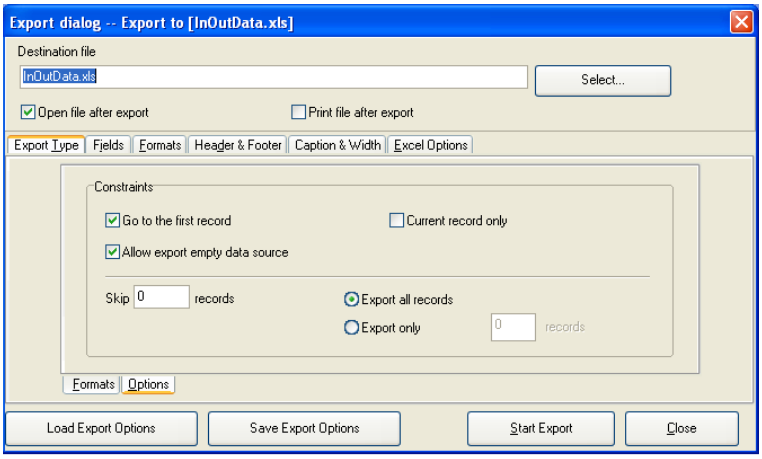
Advanced Export is mainly used in secondary development to transfer the data in our software. When needs to export the data, choose in here need to export the data the item and its setting attribution. Single-click "**Advance Export**" button on **Attendance Record** interface, shown as following figure.



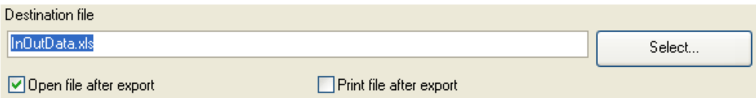
Here we take the Excel table to export as the example, explain advance export the function.

1. Choose Export file format on the **Export Type** label of **Formats** tab as **MS Excel**.

2. Set the parameters in the **Options** tab. Show as below:

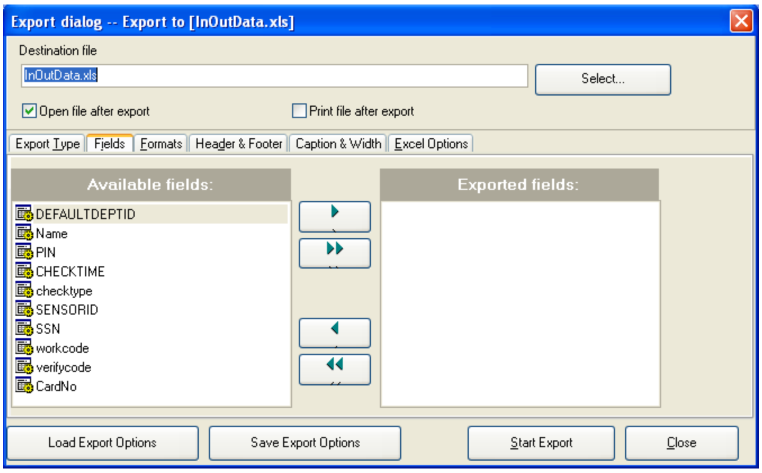


3. Input the filename and choose the saving position.



4. Set the field, the format and so on

A. Field



Chooses field which want to export, There are ten fields: DEFAULTDEPID, Name, PIN, SSN, CHECKTIME, checktype SENSORID, SSN, wokecode, verifycode, CardNo.

Note: Only the machine have **Workcod** feature, can choose to export the **workcode** field.

B. Format

Set export the field form, there are the Common format and user self-define form two formats.

C. Page head and page foot (**Header** & **Footer)**

Here may add the page head /foot page for file which Export, input the explanation writing in the page head/foot, these writing will be able to display in the start and the ending of exported the file.

D. Caption & **Width**

There are ten fields which Export: Department, Name, No., Data/Time, Status, Location ID, ID Number, Workcode, Verify Code, CardNo, label it with the easy memory the title and defines each field the display width.

E. Excel Options

Set the Fields and Styles to export.

5. Save Export Options

After setting the field, the format and so on, for provide the convenience to export next time, will be allowed to save this setting in the file, next time will export this setting instead to set again.

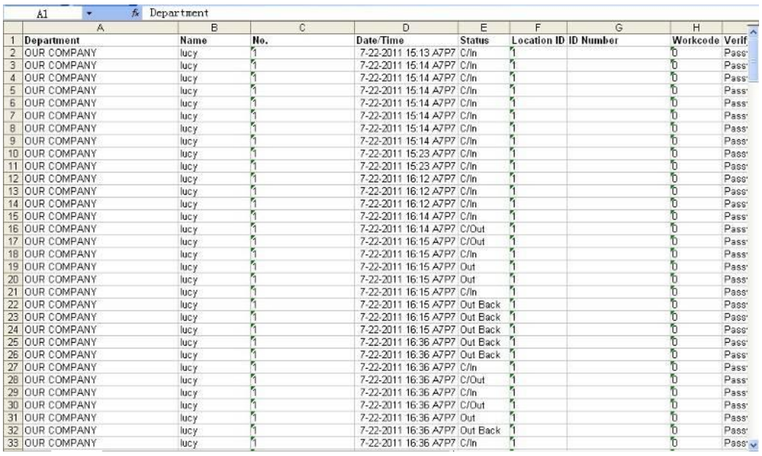
6. Load Export Options

Directly import setting file before save, then was allowed to transfer the setting before you setup, directly export the data again.

7. Start Export

After all options set finished. Click "**Start Export**" button, the following window will popup:

When indicator inform you completes download data, then may confirm and gets down the data to directly which the examination Export. Show as below:



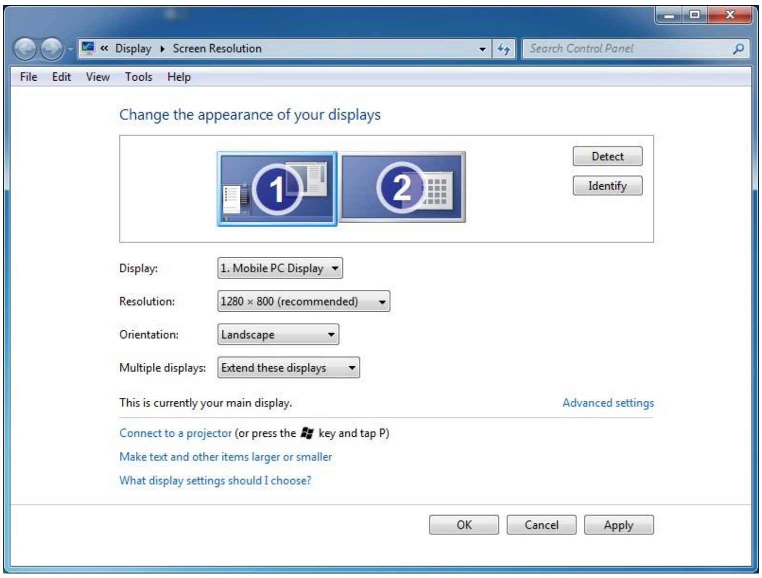
	A	B	C	D	E	F	G	H	
1	Department	Name	No.	Date/Time	Status	Location ID	ID Number	Workcode	Verif
2	OUR COMPANY	lucy	1	7-22-2011 15:13 A7P7	C/In	1		0	Pass
3	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
4	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
5	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
6	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
7	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
8	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
9	OUR COMPANY	lucy	1	7-22-2011 15:14 A7P7	C/In	1		0	Pass
10	OUR COMPANY	lucy	1	7-22-2011 15:23 A7P7	C/In	1		0	Pass
11	OUR COMPANY	lucy	1	7-22-2011 15:23 A7P7	C/In	1		0	Pass
12	OUR COMPANY	lucy	1	7-22-2011 16:12 A7P7	C/In	1		0	Pass
13	OUR COMPANY	lucy	1	7-22-2011 16:12 A7P7	C/In	1		0	Pass
14	OUR COMPANY	lucy	1	7-22-2011 16:12 A7P7	C/In	1		0	Pass
15	OUR COMPANY	lucy	1	7-22-2011 16:14 A7P7	C/In	1		0	Pass
16	OUR COMPANY	lucy	1	7-22-2011 16:14 A7P7	C/Out	1		0	Pass
17	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	C/Out	1		0	Pass
18	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	C/In	1		0	Pass
19	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	Out	1		0	Pass
20	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	Out	1		0	Pass
21	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	C/In	1		0	Pass
22	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	Out Back	1		0	Pass
23	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	Out Back	1		0	Pass
24	OUR COMPANY	lucy	1	7-22-2011 16:15 A7P7	Out Back	1		0	Pass
25	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	Out Back	1		0	Pass
26	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	Out Back	1		0	Pass
27	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	C/In	1		0	Pass
28	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	C/Out	1		0	Pass
29	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	C/In	1		0	Pass
30	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	C/Out	1		0	Pass
31	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	Out	1		0	Pass
32	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	Out Back	1		0	Pass
33	OUR COMPANY	lucy	1	7-22-2011 16:36 A7P7	C/In	1		0	Pass

7.7 Primary/Secondary Display Setting

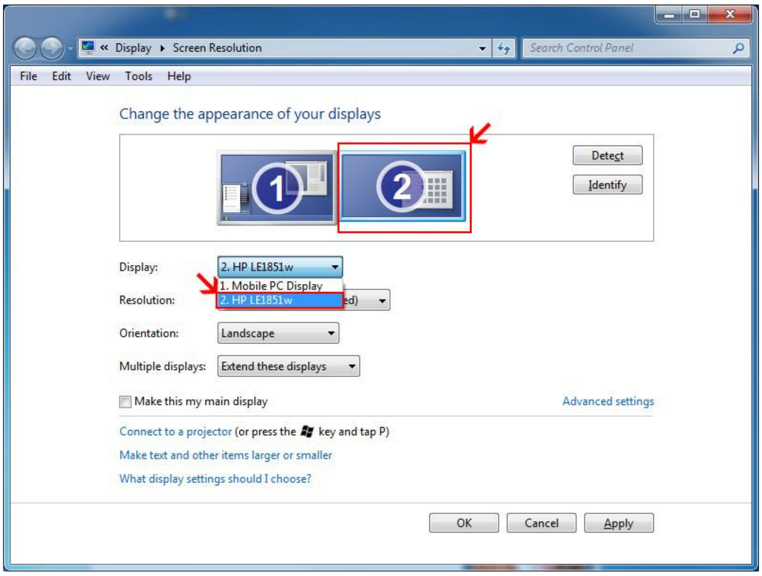
Take the settings of primary and secondary displays in the Windows 7 operating system as an example. About the settings for other operating systems, please see their corresponding operator's manuals.

1. Connect multiple displays to the host. (**Note**: The host should support multi-display output. Otherwise, it cannot be connected to multiple displays.)

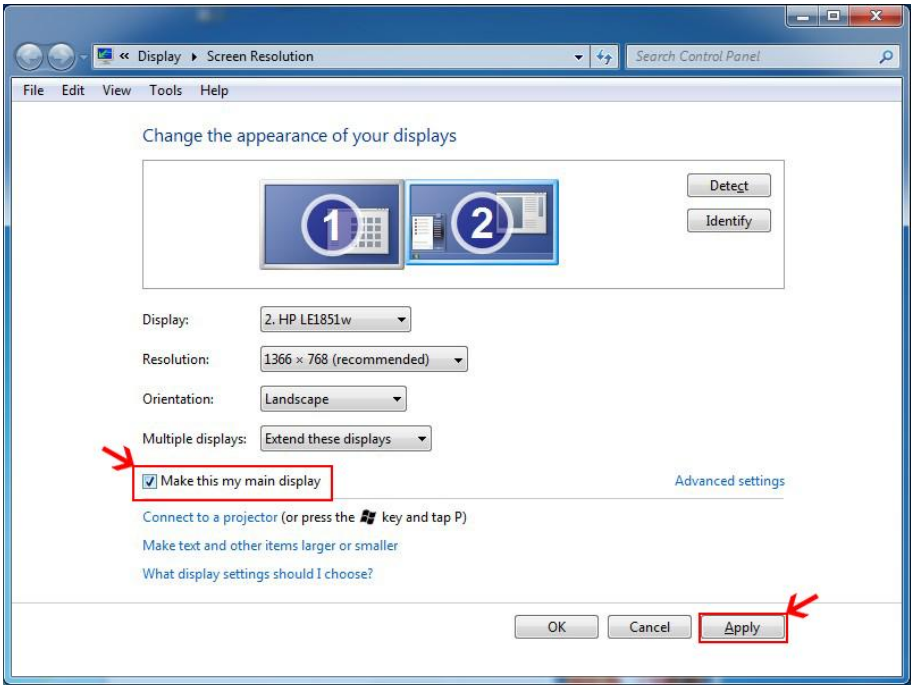
2. On the desktop, right-click > **Screen Resolution**. The **Screen Resolution** window is displayed as shown in the following figure:



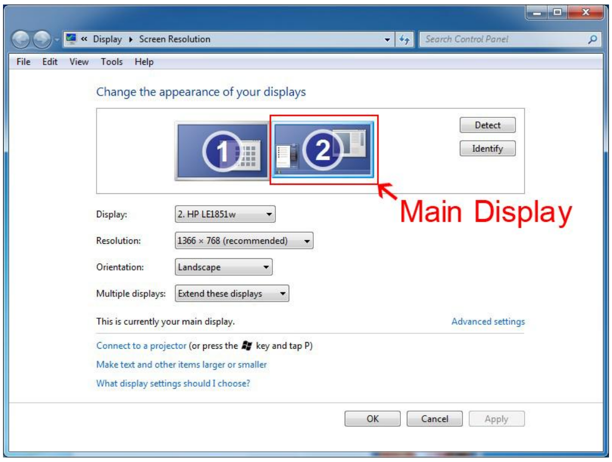
3. Click the button below **Display**. Select the display to be set as the primary display from the drop-down list, or direct click and select the display icon; as shown in the following figure

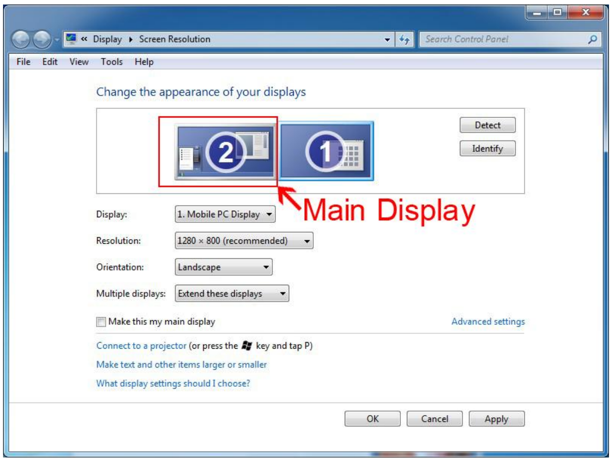


4. Check **Make this my main display**:



5. Click the **[Apply]** button to apply settings.





☺**Remarks**: Click the number icon of the display, and drag it to the left or to the right to switch the display positions of the primary and secondary display.

As shown in the preceding figure. When the secondary display is on the left of the primary display, you can select the functional icon and drag it to the left. The functional window will be split and displayed in the secondary display.

When the secondary display is on the right of the primary display, you can select the functional icon and drag it to the right. The functional window will be split and displayed in the secondary display.

7.8 Others

To monitor the devices in a centralized manner, enable **Task Manager** to check the CPU usage. The CPU may function improperly with more than 80% resources occupied. See 5.21 Set Audio and Video Parameters Appropriate for Your Network to decrease the device bit rate, or lower the resolution.

1. Check the manufacturer website regularly for the latest software version.

2. Know the factory default parameters of cameras produced by our company.

IP Acquisition Mode	Manual settings
IP Address	192.168.1.88
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
HTTP Interface	80
UPnP	Disabled
DNS Acquisition Mode	Manual settings
Primary DNS	192.168.1.1
Motion Detection	Disabled
Alarm Input	Disabled
Wireless	Disabled
User name	admin
Password	admin